The Persuasive Power Of Energy Independence

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Abstract

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Rachel Reynolds, PhD., Supervisor

The dissertation examines the public usage of the phrase "energy independence" during the years 1973 to 2010. More than 1600 separate articles that reference the phrase were identified in four content sources, the *New York Times*, the Washington *Post*, the *Christian Science Monitor*, and the *Wall Street Journal*. The study methods include content analysis and discourse analysis. The content analysis examined and coded 400 articles, recording observed instances of frames, communicative functions, and comment sources to identify frequency patterns. The discourse analysis applied a range of strategies and tactics to a subset of 16 articles, including examinations of lexical choices, tropes and metaphors, and cultural understandings. Findings include the identification of three myths related to the phrase "energy independence:" the *indomitable America Spirit*, which asserts that Americans, individually or collectively, can achieve anything they set their minds to; *America as a self-delusional addict*, which suggests undesirable American behaviors have resulted in destructive addictions; and *oil-producing nations represented as villains.*

Chapter 1: Study Overview and Rationale

1.1 Study Objectives

The purposes of this study are to chronicle, analyze, and interpret historical public references in the U.S. energy independence and related phrases, such as energy addiction, during the 1973 to 2010 period. The definition of public reference for the purposes of this study is: a direct quote or paraphrased interpretation by news media, a government official or candidate, or spokesperson for an industry or interest group or political party, as published in a news account. The study examines shifts in usage and control of the phrase over time. Wodak and Myer (2009) observe, "texts are often sites of social struggle in that they manifest traces of differing ideological fights for dominance and hegemony" (p. 89). References to energy independence among influential persons and organizations mark the site of struggle for control of the rhetorical power of the phrase and application of its power toward energy policies, practices, actions or inactions, attitudes, and perceptions.

The study also examines how the elusive quality of the phrase definition aligns with Barthes's (1972) idea that "any myth with some degree of generality is in fact ambiguous" (p. 157). The absence of an agreed upon definition serves ambiguity functions in the energy independence mythology. Such ambiguity assuages curiosity, inhibits public debate, and enables evasion of dialogue that could potentially result in progress toward specific and authentic energy independence solutions. Positioning proposed solutions as contributors toward energy independence would likely divert attention from other considerations, such as the environmental effect of energy independence. For example, mass shifts toward domestically-sourced coal-generated electrical power as a substitute for petroleum products would likely reduce net imported sources of energy and hence qualify as a contributor toward energy independence

under most definitions of the phrase, but it would also likely result in elevated levels of environmental damage.

1.2 Study Justification

Discourses related to energy independence provide ample opportunity to observe and assess persuasion practices. A consideration that helps justify energy independence as a rich communication study opportunity is the lack of a consistent definition. Each promoter and critic of energy independence forms a personal or organizational definition, resulting in an ongoing struggle for hegemony as the range of understood meanings, motivations, discursive strategies, advocates, and appeal tactics shift over time. Discursive hegemony, which is further addressed in section *1.3 Theoretical Literature Review*, is an important consideration for this study.

In some cases, the intent of the phrase may be to promote political action and influence policy, which can lead to additional challenges in interpreting its meaning. For example, many observers equate energy independence with oil independence, and the deployment of the phrase in such contexts is a good example of Burkean narrowing of scope as Jasinski (2001) describes (p. 117). But even within this group, oil independence definitions may vary from zero imported oil, to net annual exporting of oil, to capping imports at some arbitrary date in history. Such was the case when President Carter declared, “beginning this moment, this nation will never use more foreign oil than we did in 1977—never" (Miller Center of Public Affairs, 1979). Some advocates may interpret energy independence in terms of free markets, calling for dismantling of governmental efforts to influence the supply and demand for fuels, while others may promote using the vast resources of the government, such as accessing strategic petroleum reserves or declaring fuel tax holidays, to partially offset efforts of oil producing/exporting countries to manipulate market dynamics through coordinated production restrictions. This sampling of

interpretations and examples is not intended to be comprehensive; it is included to demonstrate the complexity of meaning that could potentially confound analysis.

Energy independence is a recurring theme among many, often competing special interest groups. Section *1.4 Topical Literature Review* considers a body of work related to supporting or refuting the various energy independence advocacy positions. No published study, however, provides a historical analysis to address how the discourses have emerged during a 37-year period since the introduction of the phrase in 1973 through 2010. It is important to bridge this gap in the literature to identify persuasive communicative functions, provide insight into the enduring nature of the phrase, and identify the characteristics and behaviors of energy independence frames and related American rhetorical mythologies.

The study outcomes include identification of changes in understood meanings during the study period and identification of the discursive strategies and tactics that influential individuals and groups employ to maintain or alter the understood meanings of the phrase. Such outcomes and observations are of importance because the changes to the energy independence discursive history may suggest a relationship between the phrase and attitudes toward energy companies and energy exporting nations, legislation, research and development subsidies for non-fossil fuels, conservation practices, and energy efficiency purchasing trends. Such patterns of influence are of interest to political office holders and candidates, their consultants and constituents, energy supply chain contributors, environmental advocates, citizen consumers, and the news media and news consumers. These groups engage in competing discourses, exploiting the phrase energy independence, with the goals of advancing their own agendas, influencing public opinion, and ultimately shaping public policy. The considerable persuasive power of energy independence is at stake.

1.3 Theoretical Literature Review

Framing, Barthesian mythology, and discursive hegemony serve as theoretical foundations for this study. Observations of a range of scholars are examined within this section for relevant application to the study.

1.3.1 Framing theoretical synthesis definition

This study proposes a framing theoretical synthesis definition based on the contributions of scholars as detailed in section 1.3.2 Framing Theory. Frames are information-compacting communicative packages that define cultural considerations, simplify complex issues, and limit the range of discussion, interpretations, and proposed solutions through selective inclusion, exclusion, organization, and privileging of data. Frames create plausible accounts, promote adoption of particular points of view, influence public thought and discussion, set boundaries for public discussion and ultimately help news consumers process information and form opinions.

1.3.2 Framing theory

Scholars have proposed a range of frame functions, which can be categorized as organizing and structuring, interpreting through inclusion and exclusion, and narrative construction through shared cultural understandings.

1.3.2.1 Framing function 1: organizing and structuring

The *organizing and structuring* function of framing refers to privileging and sequencing of content to form a cohesive and plausible account.

Gamson and Modigilani (1989) define a frame as “a central organizing idea for making sense of relevant events and suggesting what is at issue" (p. 157).

Kinder (2007) views frames as central story lines that define and organize issues through the use of paradigmatic signifiers such as “metaphors, exemplars, catchphrases, visual images, rhetorical flourishes” (pp. 158-159).

Pan and Kosicki (2001), in their review of Goffman’s substantial contributions to framing theory, identify the function of frames as to “yield organized ways of understanding the world” and “to locate, perceive, identify, and label" occurrences or life experiences (p. 38).

Reese (2001) offers a similar observation suggesting “frames are organizing principles that are socially shared and persistent over time, that work symbolically to meaningfully structure the world” (p. 11). He further describes the enduring nature of frames as, “embedded in the symbolic environment” and identifies the structuring function of frames as creating “a coherent package (p. 17).

1.3.2.2 Framing function 2: interpreting through inclusion and exclusion

The *interpreting through inclusion and exclusion* function of framing refers to selective presentation and treatment of content to orient the audience and promote a particular interpretation. What is included, excluded, and elaborated upon defines the boundaries of the frame.

Entman (2004) describes framing as “the process of selecting and highlighting some aspects of a perceived reality, and enhancing the salience of an interpretation and evaluation of that reality” (p. 26).

Similarly, Tankard (2001) cites Tankard, Hendrickson, Siberman, Bliss, and Ghanem, who suggest frames supply "a context and suggests what the issue is through the use of selection, emphasis, exclusion, and elaboration” (pp. 100-101).

1.2.2.3 Framing function 3: narrative construction through shared cultural understanding

The *narrative construction* function of framing refers to presentation of information through shared cultural understandings and cognitive frameworks that enables efficient interpretation of complex information

Frames are cognitive shortcuts that set limits upon what is presented, which in turn limit the range of related public discussion. Scheufele and Tewksbury (2007) suggest "frames are invaluable tools for presenting relatively complex issues efficiently, such as stem cell research, and in a way that makes they them accessible to lay audiences because they play into existing cognitive schemas" (p. 12).

Lakoff (2008) suggests frames enable the compression of vast amounts of information into recognizable patterns. Individuals identify associations through elements such as roles and word groupings. Complex narratives and frames result from combinations of simpler narratives. Individuals observe recurring cultural narratives and identify with these in their own experiences, which facilitate ascription of meaning to their own lives, experiences, and understandings of others. Once a frame is invoked, the dialogue is trapped within that frame unless one of the participants actively and successfully shifts to an alternative frame (pp. 11-12).

Van Gorp (2007) also references Goffman's observation "frames are a central part of culture" (p. 62). Van Gorp expands upon this reference with the observation of cultures as "an organized set of beliefs, codes, myths, stereotypes, values, norms, frames, and so forth that are shared in the collective memory of society" (p. 62). Van Gorp thus suggests frames are cultural, shared understandings.

1.3.2 Barthesian mythology

The mythological theory of Barthes is indispensible to this study. Barthes's (1972) observation "myth is a type of speech chosen by history," aligns with the selective function of framing. Particularly relevant to this study is the plasticity of myth (p. 110). "There is no fixity in mythical concepts; they can come into being, alter, disintegrate, disappear completely. And it is precisely because they are historical that history can very easily suppress them" (p.120). History serves as a supplier to myth, but history may evaporate within myth.

Mythology transforms one's cultural values, observes Allen (2003) in his review of Barthes; "what he (Barthes) designates by the term (myth) presents itself as natural and timeless but is, in fact, an expression of a historically specific ideological version of the world" (p. 34). "The role of the mythologist is to expose or simply remind of the artificial and constructed nature of such images" (p. 37-38). Leek (1994) offers a constructionist view regarding myths in the Barthesian sense "(myths) are evidently cultural through and through; they are fashioned by History, they did not fall fully formed from the heavens" (p. 21). The function of myth, according to Leek, is "to impose cultural messages under cover, or alibi, of naturalness" (p. 25). Similarly, this study seeks to trace the historical construction of the energy independence myth through its developmental stages and into the ways mythic constructions of the phrase are interpreted in political discourse.

Psychologist and learning theorist Jerome Bruner (2004) provides an entry point into the function of mythology. His constructionist view suggests "stories do not 'happen' in the real world but, rather, are constructed in people's heads" (p. 691). According to Brooks' (2011) interpretation, Bruner distinguishes between the paradigmatic mode, the mode of

logic and analysis and the narrative or mythic mode, which includes an emotional dimension not observed in the paradigmatic mode. The mythic mode serves to help make sense of the "emotions and moral sensations raised by the story" (p. 54). Emotional response as a function of the energy independence phrase is captured as a data element and analyzed as part of this study.

Thompson (2004) references Slotkin's characteristics of myths, "all myth, to be credible must relate the problems and aspirations of particular cultures to the fundamental conditions of human existence" and "myth depends on the creation of distinctive cultural tradition in the selection and use of metaphor" (p. 162-163). As described in section *6.3.1 Myth 1: The indomitable American spirit* the human element is satisfied in the energy independence mythology through the idea of and belief in overcoming adversity, reinforced through unrelated but parallel narratives of past national successes.

An important consideration for this study is the relationship of the phrase energy independence to American mythology. *Chapter 6: Energy Independence and American Myth Systems* identifies three instances of energy independence embedded within larger mythology narratives.

1.3.3 Discursive hegemony

The interplay among the discourses, when competing discourses present alternate understandings of the world, is an important focal point of analysis, especially in cases in which competing frames of energy independence operate under different streams of power and influence. Laclau's and Mouffe's discourse theory suggests there is an ongoing discursive struggle of competing discourses to stabilize and narrow the range of meanings in ways that support particular world views. According to Phillips and

Jorgensen (2002) any closure of meaning achieved, however, is temporary and unstable (p. 41). The adoption of energy independence discourses by leaders and writers of many special interests and political affiliations suggests the phrase has enduring persuasive power, even as there is struggle among discourses for fixation of meaning.

Wodak and Myer (2009) define discourse as "an institutionalized way of talking that regulates and reinforces action and thereby exerts power" (p. 25). Phillips and Jorgensen (2002) observe the struggle among discourses causes meanings to be perpetually in flux. While it may not be possible to observe in all cases a clear hegemony among the discourses, it is often possible to identify privileged discourses and power imbalances among competing discourses. This study traces dominant frames and communicative functions over time to identify turning points in the discursive struggle for control of the phrase "energy independence."

Van Dijk (2008) observes the struggle for hegemony occurs largely within group consciousness. "If controlling discourse is a first major form of power, controlling people's minds is the other fundamental way to reproduce dominance and hegemony" (p. 357). This study examines the role of American nationalism as a means of controlling the persuasive power of energy independence.

A discussion of hegemony would be incomplete without acknowledging the contributions of Gramsci. Fairclough (2003) interprets the Gramscian view as one in which "politics is seen as a struggle for hegemony, a particular way of conceptualizing power which amongst other things emphasizes how power depends on consent or at least acquiescence rather than just having the resources to use force, and the importance of ideology in sustaining relations of power" (p. 45).

Paraphrasing Fairclough and drawing upon Gramscian ideas, Phillips and Jorgensen (2002) observe "hegemony is not only dominance but also a process of negotiation out of which emerges a consensus concerning meaning" (p.76). These discursive negotiations "challenge the dominant meanings (that) equip people with resources for resistance. As a result, hegemony is never stable but changing and incomplete, and consensus is always a matter of degree" (p. 76). This study examines the range of energy independence hegemonic and competing counter arguments, such as economic effect, environmental impact, and national security concerns.

1.4 Topical Literature Review

This topical literature review examines academic works that study references to energy independence. The purposes of the literature review are to identify and gain insight into the perspectives of foundational and contemporary researchers who share an interest in energy independence discourses, to identify recent trends in scholarly considerations and methodologies, and to identify gaps in the literature and opportunities for further study of the topic from perspectives that the academic community has not previously addressed.

A McCombs (2004) study reveals similarities between American media behaviors of the September 1973 to February 1974 period through observation of more than 1,400 articles published in five West German newspapers regarding the availability of petroleum and petroleum products during the same period. McCombs suggests the West German media created the illusion of a crisis. "This 1973 oil 'crisis' in West Germany resulted from a sharp rise in demand stimulated by intense press coverage, not from any critical decrease in supply" (p. 24). The newspapers were successful in placing the discussion of this manufactured energy 'crisis' prominently within the public agenda, contributing to a mythology construction. The reporting

created both a cognitive effect – increased fear of fuel shortages among vehicle owners interviewed – and a behavioral reaction in the form of sharply increased petroleum sales compared to the same period of the prior year. Although the McCombs study does not specifically examine discursive struggles, it does demonstrates that news media can affect the level of interest or even manufacture interest a topics such as energy supply interruptions or the idea of energy independence, which expands the volume of discourses related to the subjects.

Stein (2006) offers an observation of particular relevance to this study: groups with very different and competing objectives and demographics make claims to the phrase. Stein divides the supporters of energy independence into two groups, energy security advocates and climate greens. Although these groups share a common stated objective, their policy objectives and discourses are very different. Energy security advocates convey a sense of urgency, with a focus on what must happen within the next 10 years. Climate greens focus on longer term effects, such as changes in average temperature and changes in sea level. Oil independents promote electricity, 50% of which is sourced though domestic coal, and supporting policies such as high gasoline taxes, which may lead to increased demand for electric vehicles. They also encourage the auto industry to transition from the internal combustion engine. Oil independents support investment in solar, wind, coal, and perhaps nuclear sources of energy. Stein's classification of energy independence advocates along the lines of fuel imports and environmental effects may account, in part, for inconsistency in definitions of energy independence. Recognizing the diversity of motivations among supporters of energy independence is essential to exploring the historical struggle for hegemony that this study examines.

Energy independence and environmental concerns are often linked in both academic literature and news reporting. Heiman and Solomon (2007) examine, from an academic

perspective, the growing importance of the environmental frame, suggesting "the U.S. public may also have to accept global climate change rather than energy prices as the driving force behind national energy policy" (p. 23). Heiman's and Solomon's observation prompted the inclusion of environmental frame in the examination energy independence discourses and the data capture and analysis of the environmental frame of energy independence. While it is not the intent of this study to focus on environmental discourses, there is a degree of reporting inseparability between energy production and consumption and the effect on the environment.

Dryzek's (2005) concept of Promethean discourses suggests an "unlimited confidence in the ability of humans and their technologies to overcome any problems" (p. 51). Dryzek cites multiple examples of subscribers to the Promethean discourse implicitly denying the finite resources of the earth, which suggests investment in research and development will immunize nations from geological limitations. "If a shortage threatens, there is money to be made in either finding new sources of the resource in question, or in developing substitutes" (p. 53). Applying such Promethean thinking to energy independence disregards negative consequences of continual production expansion.

Some scholars have examined the political economy of energy discourses, especially as a function of manipulation of supply. Morse (2009) notes the considerable political clout that the Kingdom of Saudi Arabia (KSA) gains through its market stabilization capabilities. As a strategy to reinforce its ability to neutralize disruptions, KSA invested massive amounts of capital to increase production capabilities over the long term. Meanwhile, drilling technology has improved immensely, alleviating the logistical challenges of deep-water field development. These developments, along with increased interest in extracting natural gas from shale, leads Morse to conclude that excess supply and stable low prices will return over the mid to long term.

If this assessment is accurate, the implications for energy independence discourses are noteworthy, with the expectation that energy independence discourses would likely diminish during periods of excess supply and corresponding lower prices.

The economic considerations frame is an important to energy independence discourses throughout the study period. Academics Solomon, Barnes, and Halvorsen (2007) describe economic drivers, such as government mandates of gasoline blend requirements and government subsidies or tax exemptions that have shaped the discourses related to fossil fuel alternatives as viable fuels. Market fossil fuel pricing promotes or retards interest, research, and discourses in alternative fuels. This observation suggests a likely link between fuel prices and energy independence discourses, which may be examined as part of a future study.

As with any struggle for discursive hegemony, we expect to find voices of dissent in the form of counter frames, which stand in contrast to the incumbent dominant discourse(s). Several researchers examine the notion of energy independence from the perspective of political rhetoric among nations. Faisal (2009) observes that references to energy independence are politically motivated and promote a notion that is "unrealistic, misguided, and ultimately harmful to energy-producing and consuming countries alike" (p. 102). Faisal suggests these discourses may be unnecessarily damaging to international relations. Faisal's observation serves as an example of counter frames, which aim to unseat the taken for granted perceptions such oil exporting countries are villainous, an idea explored in detail in *section 6.3.3 Myth 3: Oil–producing Arab nations as villains*.

Deutch (2005) argues that even the very discussion of energy independence is absurd, which illuminates how discourses on energy lead to metadiscussions of what the discussions of environment address. This study labels these metadiscussions as "feasibility and desirability"

framing. Despite decades of calls for energy independence, the U.S. imports more oil as a percentage of total oil consumption each year. New energy technologies are beginning to make a difference but their contribution to energy independence is measured in decades, and will not substantially contribute to energy independence in the near to medium term. Wolf (2005) agrees, noting "America's dependence on foreign sources of supply is ineluctable, a fact of life that can be mitigated, hedged, and cushioned, but not avoided" (p. 39). In contrast, Bisk (2007) suggests energy independence both is possible and desirable. "For the sake of our shared environment and international stability, the time has come for the West to formulate a coherent energy policy dedicated to downgrading oil as the dominant international commodity" (p. 26). These arguments suggest energy independence is or is not possible and it is or is not desirable. Although not a dominant discourse in terms of observed frequency, presence of the feasible and desirable frame is consistently observed over the study period.

1.4.1 Comparisons of energy independence to historical American successes

Although the purpose of section *1.4 Topical Literature Review* is to survey academic literature related to the topic of energy independence, it is relevant to note recurring parallels to major historical national successes in both the academic literature and news reporting. Presence of comparisons of energy independence in both the academic literature and news media justifies a large-scale content analysis and may be an indicator achievement of mythology status.

Academics Nemet and Kammen (2007) examine the feasibility of dramatically increasing federal government energy research and development initiatives, and present historical precedents such as the Manhattan Project, the research program that led to the development of the first atomic bomb, NASA's Apollo space exploration program, and

the post-September 11, 2001 War on Terror as benchmarks of major government program spending acceptability.

News reporting examples of historical comparisons include a 2005 *New York Times* article that references, in the context of energy independence, the Manhattan Project and the Apollo program. The article adds a third well-known successful American effort, President Nixon's visit to China (Friedman, p. A25). The "Nixon-to-China" shared cultural reference is a metaphor for uncharacteristic and image-changing political behavior. A 20-year retrospective *Washington Post* article includes an excerpt from President Nixon's November 1973 "Project Independence" speech, which introduced the phrase "energy independence" into political and social discussion. In a direct appeal to national pride, Nixon references historical precedents and specifically defines energy independence as zero imports: "Let us set as our national goal, in the spirit of Apollo, with the determination of the Manhattan project, that by the end of this decade we will have developed the potential to meet our own energy needs without depending on any foreign energy source" (Lippman, 1993, p. A12). In addition to the Manhattan Project and Apollo program shared cultural references identified above, Nixon's speech engages a third shared cultural reference, the timeline "by the end of this decade," which is directly borrowed from President Kennedy's 1961 "Man on the Moon" address. These shared cultural references enable access to the *indomitable American Spirit* myth that suggests Americans can do anything they set their minds to achieve, a belief that is examined in detail in *Chapter 6: Energy Independence and American Myth Systems*.

Chapter 2: Methods

2.1 Approach Overview

2.1.1 Study Period

The study period begins 1973 and continues through 2010. The first observed public reference to energy independence occurred November 6, 1973 as part of a nationally televised address delivered by President Nixon, thus providing a temporal starting point for this study and an assessment framework that spans a long history of energy independence discourses (Miller Center for Public Affairs, 1973). As an interesting aside, Richard Fairbanks, a White House staff member and drafter of Nixon's address later recalled "I cut the reference to 'independence' three times from the drafts, but it kept being put back. Finally, I called over, and was told that it came from the Old Man himself" (Yergin, 2007, p. A19).

2.1.2 Study Sub-periods

The study examines sub periods of the 37-year period by decade – 1970s, 1980s, 1990s, and 2000s – to identify incremental changes in discourse content and active participants. Initially, the researcher collected and coded data by year for quantitative analysis purposes. The researcher then interpreted evidence and patterns to address research questions detailed in the *Chapter 3: Energy Independence Frame Analysis*, *Chapter 4: Communicative Functions of Energy Independence*, and *Chapter 5: Comment Sources of Energy Independence*. These interpretations provide insight into the history of the discourse and external influences on its appearance in public and political discourse.

2.1.3 Data Selection Criteria and Procedures

A primary objective of the content analysis is to observe how the understood meanings of energy independence have changed or have remained consistent during the study period. To this

end, mainstream media data sources spanning the full study period are included. To be included within the data set, selected articles must have been published during the study time period 1973 to 2010 and must refer to energy independence or close variations, such as dependence on imported energy and dependence on foreign oil. All material was published in *The New York Times*, The *Washington Post*, *The Wall Street Journal*, or *The Christian Science Monitor*. The full data set of 400 articles was used for the content analysis. The discourse analyses examine a subset of 16 select articles from the full data set, one from each media source and each decade. Most of the articles selected are news reporting but the data set does include a few opinion-editorial articles.

The researcher used the Power Search features of Lexis Nexis for year-by-year, publication-by-publication queries on the phrase energy independence in these four nationally recognized mainstream print format news publications for the 37-year study period. Queries on the phrase energy independence yielded nearly 1,600 results. In an effort to reduce the data set to a representative sample of approximately 25% (400 articles or 100 articles per publication), every n^{th} article was selected. The n^{th} is determined by dividing the gross number of search result articles for each publication by 100 (n^{th} = gross number of articles/100). The resulting quotient, rounded down to the nearest whole number, is the n^{th}. For example, the 696 identified *New York Times* articles divided by 100 equals 6.96, rounded down to 6. In this example, every 6^{th} *New York Times* article of the search results is selected.

Using the n^{th} selection methodology alone would result in some skipped years, particularly in years with search results numbering fewer than the n^{th}. To generate a data set that is more representative of the 37-year study period, one article was selected using a random number table for years that were skipped by the n^{th} method. The combination of these primary

(n^{th}) and secondary (random sample within certain low volume years) selection methods ensures at least one article is included for each year in which queries generated at least one result.

2.1.3.1 Disqualified articles

Certain articles are disregarded for the following reasons:

- The article is an aggregation of news of the prior week. These aggregation-type articles are typically published on Sundays and holidays.
- The article is a letter to the editor. This study focuses on mainstream print media usage and coverage of energy independence, therefore feedback from readers is not considered relevant to the study objectives.
- The article topic addresses energy independence for nations other than the United States.

In these cases of disqualified articles, the next valid sequential article of the search result is considered the n^{th} article for selection purposes.

2.1.4 Scope Limitations

The phrase energy independence existed in the lexicon of the natural sciences and physics well before the 1973. There is no observed evidence that the natural sciences references to energy independence are related to the political and cultural references that first emerged in the early 1970s. Search results yielding natural sciences references are disregarded for the purposes of this study.

For the purposes of this study, America or American refers to the United States and its residents rather than the hemispheric set of countries known as the Americas.

This study does not intend to measure effects of energy independence on energy policy or public opinion, but rather the changes in interpretations and understood meanings. Effects measurement may lead to a future related study.

2.2 Applied Methods: Content Analysis

Content analysis procedures include direct observation of texts, applying coded structure to unstructured text data, developing rules-based data collection instruments, executing uniform training across the full coder population to promote intercoder reliability, and subjecting data to validity analysis. Content analysis provides a structure to identify trends and an unbiased path toward the discovery of expressed meanings to enable the deep qualitative investigation and discovery of latent meanings through the inherently interpretive nature of applied discourse analysis.

The content analysis has three explicit objectives: 1) to identify frames related to energy independence 2) to gain insight into the communicative function the phrase serves and 3) to identify what categories of speakers use the phrase. Each of these identification activities is examined by the sub periods 1970s, 1980s, 1990s, and 2000s to determine shifts in usage of the phrase.

In this study, content analysis is foundational and enables deeper examination through to discourse analysis. Wodak and Myer (2009) support such an approach: “The analyst can examine with what frequency particular statements occur. Frequencies can be used to identify trends. However, for the explanatory power of discourse analysis, the qualitative aspect is of greater importance than the quantitative” (p. 50).

2.2.1 Content Analysis Data Collection and Coding

The researcher developed a code sheet of 22 data points, adapting and expanding upon a model that Tankard (2001) and colleagues developed. "We proposed an approach to studying frames in which a vital first step would be to identify a list of frames for the particular domain under discussion" (p. 101). The objectives are to systematically identify working lists of the major energy independence frames, functions, and communicative sources observed, empirically document the dominant usage during each sub-period, and analyze the empirical data. More simply stated, this analysis broadly identifies who is talking about energy independence during which time periods and contexts. These categorical indicators provide the structural framework for deeper examination in subsequent chapters.

2.2.1.1 Code sheet development

Prior to launching the full content analysis of 400 articles, two intercoder reliability tests were performed. The objective of the tests was to identify improvement opportunities in the preliminary coding instructions and coding sheet. For the first intercoder reliability exercise, two Drexel University Culture, Communication, and Media graduate students volunteered to test the preliminary coding instructions and coding sheet (v1). The testers read and coded five *New York Times* articles and five *Washington Post* articles. The researcher read and coded the same set of 10 articles to identify instances in which the testers and researcher coded specific data points inconsistently. The test yielded intercoder reliability results of 78%. During a post-test guided discussion, the researcher asked the testers to provide commentary regarding the coding instructions, coding sheet, and their overall test participation experience. The researcher then used the coding inconsistencies and descriptive feedback to clarify and improve the coding instructions

and code sheet. A third volunteer tested the revised version (v2) of the coding instructions and code sheet, resulting in an improvement in intercoder reliability to 82%. Very minor adjustments were then made to the coding instructions and coding sheets. The researcher and supervising committee members agreed that the iterative adjustments made based on two test outcomes had yielded study-ready coding instrument and instructions. The researcher attributes the improvement in intercoder reliability to iterative improvements in the coding instrument. The final versions of the instructions and code sheet, v3, are included in *Appendices A* and *B*.

2.2.1.2 Intercoder reliability testing

The researcher then read and coded each of the 400 selected articles using the final version of the coding instruments. To test for intercoder reliability, four Drexel University graduate students of the Culture, Communication, and Media program each read and coded 10 articles randomly selected from the full data set of 400 articles. The researcher's responses were compared to the responses of the graduate student participants; resulting in a match of 684 variables of a possible 840 or reliability of 81.43%. Krippendorf (2004) recommends relying "only on variables with reliabilities above $\alpha = .800$ (p. 214). Riffe et al (2005) agree, suggesting "a minimum level of 80% is usually the standard" (p. 147). Scott (2009) concurs, "it is customary to require > .800" (in Krippendorf, p.354). It should be noted no actions were taken to control for agreement due to chance. This defect will be corrected as part of preparations to submit of sections of this dissertation for publication in a peer reviewed journal

2.3 Discourse Analysis

2.3.1 Discourse Analysis Overview

Phillips and Jorgensen (2002) suggest the overarching objective of discourse analysis is to reveal taken-for-granted understandings, opening them up for discussion and reconsideration. In taking something for granted, meaning is fixed and alternate meanings are suppressed. To overcome this tendency and extract alternate meanings, discourse analysts attempt to describe the empirical material in a different way than it describes itself. The challenge for discourse analysts is to identify naturalized understandings. It is the discourse analyst's role to identify hegemonic power relations and accompanying language that may conceal a portion of the spectrum of understandings. For example, during the initial years of the study period, informal observation identifies an expectation that energy independence is widely desired and supported as a beneficial aspiration despite great ambiguity regarding what it means, if and how it can be achieved, the costs of such an undertaking, and collective commitment to see it through to some measurable outcome. In this example, the taken-for-granted understandings include energy independence is desirable because energy is a crucial natural resource, with direct effects on national prosperity, security, world leadership, global environment, and international influence. As an example of destabilization of meanings, observed informally by scanning articles in mainstream media sources, during the later years of the study period evolving discourses challenged the taken-for-granted understanding of energy independence as possible and desirable. Voices have emerged in recent years suggesting energy independence is neither possible nor desirable.

According to Phillips and Jorgensen (2002), Fairclough's critical discourse analysis (CDA) focuses on intertextuality and interdiscursivity, and is acutely aware of the role of new

combinations of existing discourse as agents for social change. CDA is explicitly interested in studying transformation over time, which is particularly relevant to this historical study. CDA employs linguistic analysis as a primary tool to reveal features in texts that would frequently go unnoticed in casual reading. The level of detail that CDA demands may limit the number of texts that a researcher can include in the study (p. 73). The discourse analyses examine a subset of 16 select articles from the full data set of 400 articles, one from each media source and each decade.

Dryzek proposes a question-based method of analyzing discourse that seeks to identify 1) basic entities whose existence is recognized or constructed 2) assumptions about natural relationships 3) agents and their motives and 4) key metaphors and rhetorical devices (2013, p. 17-18).

Fairclough provides a three dimensional model of analysis that includes 1) text, which concentrates of the formal features such as metaphors, wording, vocabulary, grammar, and syntax 2) discursive practice, or how text is produced and consumed as an agent of social and cultural change and 3) social practice (Phillips and Jorgensen 2002). This model is used in tandem with close readings, focusing on the speaker's or author's lexical and stylistic choices as persuasive devices.

Wodak and Myer observe (2009) "CDA researchers are interested in the way discourse (re)produces social domination. They view the objective of CDA is "to disentangle the giant milling mass of discourse, to chart what is said and can be said in a give society at a given time" (p. 9, 36). Wodak's and Myer's observation is particularly relevant to this dissertation, as hegemony and the changes in meaning over time inspired the initial interest in the study of energy independence discourses. The endurance of the energy independence phrase and its adoption by diverse groups to support an array of communicative functions aligns to Wodak's

and Myer's metaphor of an entangled milling mass of discourse. Usage of the phrase, particularly by American presidents, prompted a closer examination of changes in intended meaning (or intentional ambiguity) and interpretation over time.

2.3.1 Discourse Analysis Strategy and Tactics

The discourse analysis strategy of this study looks for patterns in the details of the text, including lexical choices, emotive language, repetitions, sequencing, metaphors and other tropes, dramatic shifts in emotional appeals, and other linguistic and rhetorical devices. These textual patterns reveal clues about the author's intended effect upon the reader.

2.3.1.1 Analytical tactic – lexical choices and implicit meanings

Wood and Kroger (2000) offer a suggestion that serves as a guide for interpretation, "Assume that a focus on the literal meaning of an utterance or text may be the least helpful analytical strategy; concentrate on what the speaker or writer is doing (p. 92). Fish (1980) makes a similar observation, suggesting surface structures may be misleading. Taking this advice of Wood and Kroger as well as Fish, the researcher looked for implicit meanings to access deep structures, observe patterns beyond literal interpretations, notice the effect of word choices and sequence upon the shaping of meaning, and examine the stylistic approaches to grasp the reader's experience.

2.3.1.2 Analytical tactic – tropes and metaphors

Fairclough (2003) suggests asking if there are "metaphorical relations between exchanges, speech functions, or types of statement" (p. 193). Identification of metaphors used and the function they serve provides insight into learning beyond the literal.

2.3.1.3 Analytical tactic – substitution

According to Wood and Kroger (2000), considering "which utterance could reasonably be substituted for the utterance at issue" (p. 107) is useful to gain insight into the function of the phrase. The researcher replaces a particular word in a text to determine how the original word influences identity and attitudes. In this study, for example, *energy detoxification* may be substituted in textual analysis for energy independence. The analysis examines through substitution the affects the tone, relationship between speaker and audience, and perceived meanings.

2.2.3 Validity

To help ensure validity, the data set includes an approximate 25% sample (400 of 1596 articles) of all available data referencing energy independence during the time period 1973 to 2010 from four mainstream news media.

Phillips and Jorgensen (2002) offer some specific suggestions to help ensure validity, including examining a range of textual features rather than just one feature and accounting for conflicts in the analysis (p.173). The multiple methods applied in this study (content analysis, discourse analysis, and framing analysis) provide multiple views of the data and thus contribute to validity as Phillips and Jorgensen suggest.

Chapter 3: Energy Independence Framing Analysis

3.1 Framing Analysis Overview, Objectives, and Approach

Objectives of the framing analysis portion of the study include identification, examination, and interpretation of frames related to energy independence. The historical approach of this study helps to demonstrate how successful frames competed for, achieved, and maintained power relative to competing, less successful frames. Observed frequencies of each frame across the full data set of 400 articles are measured through content coding and examined through statistical testing. Frequency analysis provides valuable but limited insight; a closer examination of a subset of 16 articles, including one article from each source (*New York Times*, *Washington Post, Wall Street Journal*, and *Christian Science Monitor*) and from each decade (1970s, 1980s, 1990s, and 2000s) leads to deeper revelations. Together, the content analysis and discourse analysis help to prompt insights and draw conclusions. As previously noted in *Chapter 2: Methods*, Wodak and Myer (2009) support such an approach: "The analyst can examine with what frequency particular statements occur. Frequencies can be used to identify trends. However, for the explanatory power of discourse analysis, the qualitative aspect is of greater importance than the quantitative" (p. 50).

Frequencies are measured for each of the six frames identified. Category frequency descriptions are defined as follows:

- Stable frequency: the average observed presence of a specific frame, measured as a percentage of data set articles published within a specific decade, is within a ten-percentage point range across all decades of the study period.

- Increasing frequency: the average observed presence of a specific frame, measured as a percentage of data set articles published within a specific decade, consistently exhibits an increasing or rising pattern across all decades of the study period.
- Decreasing frequency: the average observed presence of a specific frame, measured as a percentage of data set articles published within a specific decade, consistently exhibits a decreasing or declining pattern across all decades of the study period.
- Low frequency: the average observed presence of a specific frame, measured as a percentage of data set articles published within a specific decade, is less than 15%.
- Moderate frequency: the average observed presence of a specific frame, measured as a percentage of data set articles published within a specific decade, is within the range of 15% to 35%.
- High frequency the average observed presence of a specific frame, measured as a percentage of data set articles published within a specific decade, is greater than 35%.

3.1.1 Framing Analysis Research Questions

The framing analysis seeks to address the following research questions:

1. What are the major frames observed in energy independence discourses?
2. Of the frames identified, which are the most recurring, persistent, and enduring?
3. Do the frames related to energy independence align to sub periods of the overall study?

3.1.2 Frames Theoretical Synthesis Definition

For convenient reference within *Chapter 3: Energy Independence Framing Analysis*, this section restates the theoretical synthesis definition of framing developed in the section *1.3.2 Framing Theory*.

Frames are communicative packages that define cultural considerations, simplify complex issues, and limit the range of discussion, interpretations, and proposed solutions through selective inclusion, exclusion, organization, and privileging of data. Frames create plausible accounts, promote adoption of particular points of view, influence public thought and discussion, set boundaries for public discussion and ultimately help news consumers process information and form opinions.

3.2 Identified Frames Operational Definitions

Six frames were identified and defined through examination of the data to address framing research question 1.

3.2.1 Frame 1: Economic Considerations

The economic considerations frame presents energy independence in terms of economic benefits of achieving energy independence or negative consequences of continued dependency on foreign sources of energy. The economic frame suggests failure to achieve energy independence is damaging to the domestic economy. Indicators of the economic considerations frame include references to free markets or market forces, inflation, economic growth measurements such as GDP, trade balance, taxation or tariffs, and jobs creation or preservation. A range of supporting themes include: imported sources of energy exacerbate the trade imbalance; efforts to promote energy independence will create domestic jobs; global energy

supplies are diminishing and global demand is sharply increasing, therefore global prices may sharply rise and act as a drag on the domestic economy.

3.2.2 Frame 2: Specific Solutions

The specific solutions frame presents energy independence in terms of proposals to reduce energy imports, such as increased domestic fossil fuel production, alternative fuel research and development, or improved efficiency and conservation. For example, a 1993 *Washington Post* article describes a range of specific solutions attempted in response to the 1973 oil embargo, including, "the 55-mile-an-hour speed limit, mandatory fuel efficiency standards for automobiles, a massive switch to oil by industry to other fuels, a huge surge in orders for nuclear power plants, federal subsidies for costly alternatives to oil, and the trans-Alaska oil pipeline" (Lippman, p. A. 12).

3.2.3 Frame 3: National Security

The national security frame suggests energy independence is an important component in preventing and mitigating threats to national security. The national security frame further suggests reliance on imported sources of energy provides energy-producing nations with disproportionate international political clout, funds hostile nations, and enables terrorism. Indicators include references to risks such as terrorism or energy supply interruptions. One of the more dramatic examples is President Carter's declaration of energy independence as, "the moral equivalent of war" (Clayton, 2005, p. 11). War is always a matter of national security, as a primary goal of war is to undermine the stability and security of other nations. Many moral systems view self-preservation as justified or even an obligation. Carter's declaration left little room for feasibility and desirability arguments.

3.2.4 Frame 4: International Relations

The international relations frame presents energy independence discussion and proposed solutions relative to U.S. relations with other countries, for example President Nixon's introduction of Project Independence as "a campaign to end foreigners ability to disrupt the U.S. economy" (Lippman, 1993, p. A12). The international relations frame is distinct from the national security frame in that national security assumes and active or latent threats; examples within the international relations frame may exhibit signs of tension at times, but are generally non-threating. The idea of energy independence may always be viewed as relative to other nations because discussions of energy independence begin with the premise of existing relationships between energy exporting and energy importing countries as a contributing cause and essential element of energy dependence. From this view, all news coverage of energy independence is within the international relations frame. This international relations frame operational definition addresses only those observed instances in which U.S. relations with other countries are explicitly addressed.

3.2.5 Frame 5: Environmental Concerns

The environmental frame presents energy independence discussion and proposed solutions relative to environmental concerns. Indicators of the environmental frame include direct references to the environment or related words and phrases such as pollution, contamination, global climate change, greenhouse gases, and ecosystems.

3.2.6 Frame 6: Feasibility and Desirability

The feasibility and desirability frame questions the validity of the assumption that energy independence is achievable and beneficial. Feasibility and desirability frames may challenge

taken for granted assumptions and may be related, in part, to the extended period of unfulfilled promise of energy independence and may aim to undermine the dominant discourse.

Arguments in favor of energy independence are often presented in terms of positive outcomes, such as reduced environmental damage, improved national security, or economic prosperity. Less frequently, counter-arguments challenge the assumption that energy independence is feasible or desirable. In most observed cases, the challenge to feasibility or desirability manifests as a response to an existing and opposing frame; there is just one observed instance in the of the 16-article subset in which feasibility or desirability is the lead or dominant frame.

In all decades, observed instances of the feasibility and desirability are of the lowest observed frequency of all frames related to energy independence, perhaps suggesting enduring national optimism that is explored in detail in the *Energy Independence and American Myths Systems* chapter. The observation of very low frequencies in the 1980s data may be related, in part, to depressed oil prices during the second half of the decade, when annual average oil prices ranged from a low of $14.44/barrel in 1986 and a high of $18.33 barrel in 1989, compared to 1980 levels of $37.42/barrel (McMahon, 2013); sustained periods of low prices likely result in reduced perceived need for energy independence and related discussions regarding feasibility.

3.3 Notable Frames Frequency Patterns

Frames are not mutually exclusive; more than one frame may be observed in any article, as demonstrated in *Table 3.3: Distribution of Observed Frames Per Article*.

Table 3.3 Distribution of Observed Frames Per Article

# Frames Observed	Instances
0 Frames	9
1 Frame	82
2 Frames	119
3 Frames	115
4 Frames	62
5 Frames	11
6 Frames	2

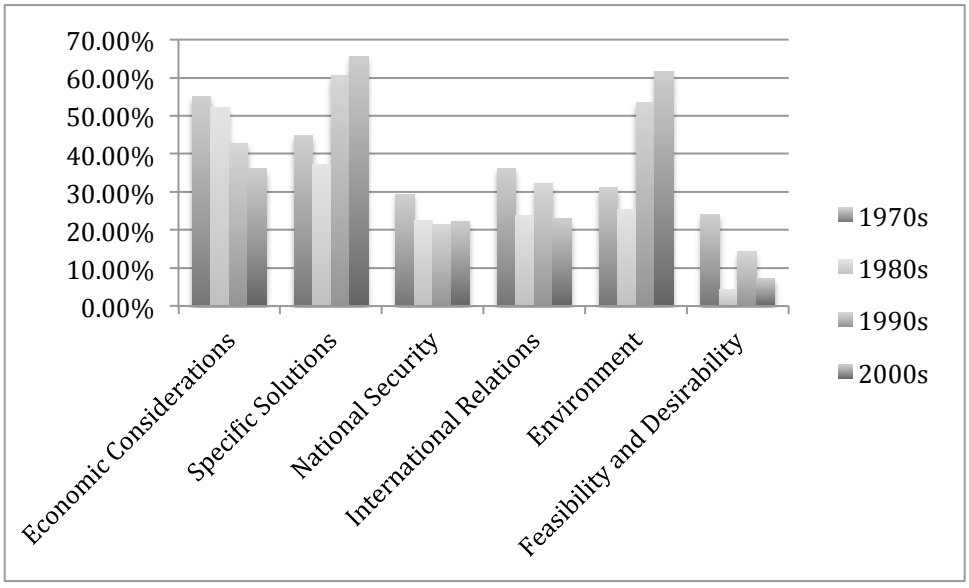
3.3.1 Frequency of Observed Frames across the Study Period

Prior to detailed discussion of each observed frame separately, it is informative to compare observed frequencies of all frames for the full study period and full data set. As visually demonstrated in *Table 3.3.1.1 Observed Frequency of Frames* by Decade and *Chart 3.3.1.2: Observed Frequency of Frames*, the economic considerations frame is observed most frequently among all frames during the 1970s and 1980s. The specific solutions frame takes the lead observed frequency position during the 1990s and 2000s. The feasibility and desirability frame is the most infrequently observed frame in all decades.

Table 3.3.1.1 Observed Frequency of Frames by Decade

Decade	Frame 1 Economic Considerations	Frame 2 Specific Solutions	Frame 3 National Security	Frame 4 International Relations	Frame 5 Environmental Concerns	Frame 6 Feasibility and Desirability
1970s	55% (32 of 58)	45% (26 of 58)	29% (17 of 58)	36% (21 of 58)	31% (18 of 58)	24% (14 of 58)
1980s	52% (of 67)	37% (17 of 67)	22% (15 of 67)	24% (16 of 67)	23% (17 of 67)	4% (3 of 67)
1990s	43% (12 of 28)	61% (17 of 28)	21% (6 of 28)	32% (9 of 28)	54% (15 of 28)	14% (4 of 28)
2000s	36% (89 of 247)	66% (162 of 247)	22% (55 of 247)	23% (57 of 247)	62% (152 of 247)	7% (18 of 247)
1973-2010 Average	42% (168 of 400)	57% (230 of 400)	23% (93 of 400)	36% (103 of 400)	50% (201 of 400)	10% (39 of 400)

Chart 3.3.1.2 Observed Frequency of Frames by Decade



3.3.2 Economic and Specific Solutions: A Logical Progression of Dominant Frames

The economic considerations frame, the most frequently observed frame during the 1970s (55% or 32 of 38 articles) and 1980s (52% or 35 of 67 articles) is one of several justification

frames designed to promote the necessity of energy independence. Frequencies of the economic considerations frame steadily decrease each decade; the specific solutions frame displaces the economic considerations as the most frequently observed frame in the 1990s (61% or 17 of 29 articles) and 2000s (66% or 162 of 247 articles).

For both the economic considerations and specific solutions frames, one-way ANOVA Tukey tests reject the null hypothesis that these frames are unrelated to decade, with statistically significant differences between the frequency of observed presence of the economic considerations and specific solutions frames between the 1970s and 1980s compared to 2000s.

In contrast to the economic consideration frame's persuasive focus of the necessity of energy independence, the specific solutions frame presumes the necessity by suggesting methods to achieve energy independence rather than a rationale for pursuing energy independence. These most prominent frame frequencies by decade follow a logical progression by first establishing the need for energy independence through the prominence of the economic considerations frame in the 1970s and 1980s, followed in the 1990s and 2000s by the prominence of the specific solutions that describe how energy independence may be achieved. The specific solutions frame is consistently among the most frequently observed frames spanning the full study period – either in the most frequently observed or second most frequently observed position in all decades. The sharp increase in frequencies of the specific solutions frame in the 1990s and 2000s may be attributable to technological advances that render some solutions more viable.

3.3.2.1 Free markets as an American myth

The economic considerations and specific solutions frames are sometimes linked through discussion of free markets, a recurring theme that may have achieved American myth status. Free markets discourses expresses or reinforce fundamental capitalist economic values and theory.

Contextual indicators of free markets include the ideas of exchange of goods and services based on supply and demand and a preference for very limited or complete absence of price altering government actions, controls, or mechanisms such as regulation, tariffs, subsidies, and quotas. The idea of free markets is generally not explained in the observed articles; the assumption that most readers of American daily newspapers understand the concept of free markets suggests it is deeply embedded and generally accepted in a society that defines itself as capitalistic. Free markets are generally presented as the preferred condition and a sign of economic health.

Reese (2001) reminds us, "the media are powerful, economic entities" that, "produce news as a commodity" (p. 29). Reese's observations suggest there is an inherent conflict between reporting unbiased information that equips readers to form opinions and make voting choices versus economic influences that can shape the message toward the organizational biases of the news organizations. Media enterprises may subscribe to a free market belief system as an essential component of their organizational cultures, manifested in published news products that express the perception of market-controlling behaviors as threats to American freedoms (2001, p. 29).

An example of economic considerations and specific solutions frames observed in tandem in a 1973 *Washington Post* article. "There will never be a huge American oil-shale industry, for instance, without solid protection by import taxes or in other ways" (Alsop, p. A19). The protectionism advocated by this article conflicts with the preference for minimal government interference, as expressed by advocates of free market.

The economic considerations and specific solutions frames again intersect at the idea of free markets in a 1975 *Wall Street Journal* article, which describes energy projects proposed for government guarantees as "too risky for private enterprise, or in other words, in the least

promising energy alternatives" (Thinking Big, p. 20). The article also suggests: "The only real solution can come through sound private capital market and less government interference." As a concluding observation, the article suggests that President Ford has "embraced the principle of government preemption of the private sector," thus having the effect of undermining the free market (Thinking Big, p. 20).

3.3.3 National Security: A Stable, Ever-present Consideration

The national security frame is observed with remarkably stable frequency, ranging from a low ratio of 21% (6 of 28) of articles published during the 1990s to a high ratio of 29 % (17 of 58) of articles published during the 1970s. The moderate yet stable observed frequencies over time suggest national security considerations are ever-present, though not necessarily the most prominent concerns. This observation is supported by one-way ANOVA Tukey tests, which fail to reject the null hypothesis that national security frame is unrelated to decade. There are no statistically significant differences between the frequencies of observed presence of the national security frame in any decade.

A 2005 *Christian Science Monitor* article notes, "Our transportation systems are so locked into oil now and the existing infrastructure, that there's a serious risk of terrorist interruptions of that infrastructure in ways that could be catastrophic" (Clayton, p. 1). The reference to infrastructural catastrophes provides a link between supply interruptions and way-of-life considerations, which presents a more expansive view than isolated incidents of terrorism. The same article attributes a quotation to the Energy Future Coalition advocacy group, "We believe that the United States' dependence on imported petroleum poses a risk to our homeland security and economic wellbeing" (Clayton, p. 1).

Although articles typically exhibit a dominant frame, multiple frames are sometimes observed within the same article. For example, a 2005 *New York Times* article argues the pursuit of energy independence is justified because it could solve multiple problems and fits several existing frames as noted in parenthesis: "from the deficit (economic frame) to climate change (environmental frame) to national security (national security frame)" and "help liberate us from dependence on the worst regimes in the world for our oil (national security frame)" (Friedman, p. 25).

3.3.4 Contentious Lexical Choices and Reporting in the International Relations Frame

The highest frequencies of the international relations frames are observed during the 1970s at 36% or 21 of 58 of articles published during the decade. The higher frequency during the 1970s may be attributable to two sustained petroleum supply disruptions - in 1973 as a result of the Arab oil embargo and in 1979 as a consequence of the Iranian revolution. One-way ANOVA Tukey testing reveals statistically significant differences between the frequency of observed presence of the international relations frame between the decades with the highest and lowest observed frequencies, the 1970s and 2000s.

As the nation struggled to adjust to unprecedented energy shortages, consumer energy price inflation, and perceived damage to its world leadership position, 1970s articles often express frustration through antagonistic tone. A 1973 *Washington Post* article offers a provocative headline, "Oil blackmail threatens U.S. independence" (Alsop, p. A19). The lexical choice of "blackmail" is of interest in that it is often used in criminal contexts. It is a bold, non-neutral word choice, likely with the intention of prompting an emotional response, underscoring contentious relations with OPEC during the 1970s. In response to the U.S.'s support of Israel during the Yom Kippur war of 1973 against an Egyptian-led coalition of Arab states, OPEC

influenced global petroleum prices by sharply curtailing production. The same 1973 *Washington Post* article offers further instigation through a quotation attributed to an unidentified Wyoming gubernatorial candidate, "Maybe the time has come for the U.S. to destroy Israel, in order to safeguard American oil supplies from the Arab countries." Although the article's editorial position denounces the statement as "monstrous," inclusion demonstrates the inseparability of energy imports and relations with other nations as well as the sentiments of extreme hostility that energy independence discussions can generate (Alsop, p. A19).

In a 1975 *New York Times* article, Secretary of State Henry Kissinger escalates the contentious tone by suggesting, "Either we succeed or the world will pay for our failure" (Cowan, p. 22). Kissinger's words may be interpreted as an implied ultimatum, suggesting unspecified dire consequences, to provoke a sense of urgency if U.S. does not fulfill its moral obligation as a world leader. The article's editorial position denounces such a role as "of the spirit that many feel led the United States into the Indochina quagmire" (Cowan, p. 22). The power of this shared cultural understanding is more prominent when considering the publication date of the article is less than 90 days prior to the U.S. evacuation of Vietnam immediately preceding the North Vietnamese capture of Saigon. With a costly defeat coming clearly into public view after years of divisive and polarizing public debate regarding the lengthy military conflict in Southeast Asia, the timing of Kissinger's comments in February 1975 is curious; the nation's tolerance for sentiments that position the U.S. as a world leader during this period was likely not optimal.

The contentious national mood is further observed into the later years of the 1970s, as in a 1979 *Christian Science Monitor* article that laments, "the general malaise is a feeling that America would no longer pull its weight in the world, that it is being pushed around by the

Russians, by OPEC" (p. 24). The lexical choice of "malaise" in this time period is interesting in that it foreshadows President Carter's address, widely referred to as the Malaise Speech, two weeks subsequent. Carter did not utter the word "malaise" during the address, despite the common association between the word "malaise" and the address. The pre-speech reference to malaise may be evidence of media priming, shaping the news-consuming public's opinion in advance of a forthcoming presidential address.

In a 1987 *Wall Street Journal* article, Interior Secretary Donald Hodel observes, "Failing to curb imports is like telling oil-producing countries, take advantage of us, we're not going to defend ourselves" (Taylor, p. 1). Quotations attributed to Hodel, who held two cabinet-level posts as a Reagan Administration insider, introduce recurring themes within the article of contentious politics and missed opportunities to reverse the trend of increased petroleum imports and the resulting consequences such as enabling the "volatile Persian Gulf to dominate world oil markets" (Taylor, p. 1). Hodel's words endow oil with a sinister quality rather than a neutral quality typically associated with commodities.

A 1993 *Washington Post* article provides a hindsight view of the long term effect of the 1973 oil embargo upon relations between oil producing and oil consuming nations, describing the shift as "the beginning of the 'new international order,' a zero-sum game that would see a wholesale redistribution of wealth from the North to the South and the diminution of the international stature of the United States and other major industrial powers" (Lippman, p. A12).

A 2005 *Christian Science Monitor* article attributes a quotation to former U.S. Senator and United Nations Foundation President Timothy Wirth, "It is one of the great failures of American politics and policy that we are so dependent on oil from one of the most corrupt and unstable areas of the world. The world's is in crisis and the U.S. is doing nothing to limit our

dependence and extraordinary vulnerability" (Clayton, p. 01). Inaction during a crisis may be viewed as a moral issue; from this perspective, failure to take corrective action is akin to dereliction of duty. Labeling efforts to achieve energy independence as a "great failure" suggest the existence of an undiscovered solution among nations rather than an impossibility, prevented from coming to fruition only by a collective lack of will, a topic explored in further detail in *Chapter 6*: *Energy Independence and American Myths Systems.*

A 2007 *Wall Street Journal* article recalls Venezuela's President Chavez threats "to embargo oil shipments to the U.S." and efforts in "fashioning an anti-U.S. alliance, the latest manifestation being the visit of Iranian President Ahmadinejad to Caracas" (Yergin, p. A19). The article accesses shared cultural understandings of Chavez and Ahmadinejad as openly hostile to the U.S. and positions a diplomatic meeting between the two heads of state as conspiratorial. The observation, "Indeed how we manage our relations with other countries and other regions is a very essential ingredient for our own energy well being" stands in contrast to the other international relations frame examples examined in this chapter (Yergin, p. A19). This example may signal a shift toward more diplomatic attitude, rather than continued escalation of hostilities.

3.3.5 The Rise and Fall of Coal and Synfuels during the 1970s and 1980s

A prominent response to the oil embargo of 1973 included the call for increased usage of coal as an alternative energy source. As noted in a 1973 *Washington Post* article, "The main ones (alternative sources) are oil shale and coal, of course; and if these are not exploited to the utmost, we cannot be independent" (Alsop, A19). All presidential administrations of the 1970s (Nixon, Ford, Carter) identified coal as a leading component of strategies to achieve energy independence. Carter, in particular, formalized coal's exalted status through a massive

commitment of public funds to create the Synthetic Fuels Corporation, informally known as the Synfuels Program, for the purpose of producing a petroleum substitute through coal by gasification and liquefaction technologies. In a July 1979 televised address commonly known as the Crisis of Confidence speech, Carter describes his vision for Synfuels: "I propose the creation of an energy security corporation to lead this effort to replace 2 1/2 million barrels of imported oil per day by 1990" (Miller Center, 1979).

The favored status that the coal industry enjoyed during the 1970s came to an end in the 1980s as a result of the Reagan administration's opposition to government sponsored coal-based energy programs, combined with excess supply and depressed prices of petroleum during several years of 1980s. Although the Reagan Administration eventually succeeded in dismantling the Carter Administration's legacy program, advocates continued to defend the Synfuels program throughout the early years of the 1980s.

Arguments in favor of and opposed to Synfuels provide some of the more interesting dialogues of the period, for example, a 1984 *Washington Post* article captures sentiments from politicians in favor of and opposed to funding cuts for the Synfuels program (Shapiro, p. A2). Representative William R. Ratchford claims, "The loud and clear message is Congress is still committed to energy independence but it wasn't (sic) a program that is well run" (Shapiro, p. A2). Representative Silvio O. Conte adds, "Of course we need energy security, but not by subsidizing oil companies to produce oil at $92 a barrel." The voice of dissent came from House Majority Leader James C. Wright who defended alleged mismanagement of the Synfuels by comparison to the Department of Defense; though the Pentagon had committed many excesses, "we don't do away with the military establishment" (Shapiro, p. A2). The article engages shared cultural references through the question, "What message does that send to the Khomeinis and

Qaddafis of the world?" (Shapiro, p. A2). The reference to declared enemies of the U.S. as a justification for preserving the program is an emotional appeal to national fear and pride and is used to counter arguments that are based in the economic unfeasibility of the Synfuels Program. Attempts to generate an emotional response are addressed in detail in *Chapter 4: Communicative Functions of Energy Independence.*

During this same time period, coal came under attack as highly environmentally damaging; coal, as a proposed solution in energy independence public discussions, yielded to other energy sources that were perceived as less environmentally damaging. A 1984 *New York Times* article suggests that "coal's biggest roadblock" is the coordinated opposition of environmental advocates (Diamond, p. 35). The headline," King coal's bid for comeback," situates coal as a legitimate but deposed authority seeking restoration of its position as a leading fuel. The article favors coal advocates with the observation "controversies such as the dispute surrounding acid rain are keeping the nation's most abundant major energy resource from fulfilling its potential as a low cost replacement for oil and gas" (Diamond, p. 35). Lexical choices such as "controversies" and "dispute" question the existence of acid rain and any resulting damage the environment, while "fulfilling its potential as a low cost replacement" directs the reader's attention to the positive economic qualities of coal. The article does provide some representation of the voice of environmental advocates, though briefly and in a subordinate position in paragraph 28 of 32, through the words of Edward S. Grandia of the Environmental Policy Institute, "The coal industry has fought environmental regulations on mining, transportation and burning of its product" (Diamond, p. 35).

3.3.6 A Remarkable Shift in the Environmental Frame

The rise and fall of the prominence of coal contributed to the most dramatic change in observed frequency among all frames - the environmental frame. Frequency of the environmental frame is stable during the 1970s at 31% (18 of 58 articles) and 1980s at 25% (17 of 67 articles), then sharply increases in the 1990s at 54% (15 of 28 articles) and 2000s at 62% (152 of 247 articles). The observed shift in frequencies is supported by one-way ANOVA Tukey tests, which reject the null hypothesis that environmental frame is unrelated to decade, with statistically significant differences between the frequency of observed presence of the environmental frame in the 1970s and 1980s compared to 1990s and 2000s.

The increased observed frequency of the environmental frame in the 1990s and 2000s along with the de-emphasis of coal as a proposed source of energy independence suggests increased sensitivity and awareness of environmental issues in the later decades of this study. Among other powerful voices that raised environmental concerns, the political and popular clout of former Vice President Al Gore's 2006 Academy Award winning motion picture documentary *An Inconvenient Truth* likely contributed to the observed increased awareness and observed frequency of the environmental frame during the 2000s.

The shift in observed frequencies of the environmental frame is accompanied by a corresponding shift in the way environmental issues are addressed. Earlier articles present environmental considerations as challenges or obstacles. Persuasive arguments from the 1970s and 1980s consider how to increase the use of coal, a highly polluting but abundant resource, while minimizing the negative real or perceived effect on the environment. For example, the idea that coal has an environmental image problem rather than a polluting problem is expressed

through observations such as "making matters worse is an image of being an outdated and dirty business, something the coal industry finds particularly rankling" (Diamond, p. 35).

In contrast to presentation of environmental concerns as challenges in the 1970s and 1980s, later decades a focus on the economic benefits of energy solutions that are less environmentally damaging. Persuasive descriptive labels emerged such as green and clean, which position associated energy technologies as environmentally friendly. The persuasive power of these labels is amplified by presenting the environmental frame in terms of economic benefits, as in a 2005 *New York Times* article that suggests, "Americans will change their long-term energy habits, and companies will develop green products, only if they are certain the price of gasoline will not go back down" (Friedman, p. 25). Jeff Immelt, C.E.O. of G.E. similarly fuses the environmental and economic arguments with the observation, "America should strive to make energy and environmental practices a national core competency and by doing so, create exports in jobs" (Friedman, p. 25).

It is interesting to note the persuasive labels such as green or clean may have more rhetorical value than technical feasibility. Wu, Mintz, Wang, & Arora (2009) observe, "Alternative fuels are labeled 'green,' perhaps from the perception of lower harmful emissions. These fuels are not necessarily greener than fossil fuels when considered from the perspective of water consumption, particularly fresh water" (p. 981). The insights of Wu, Mintz, Wang, & Arora suggest the perceived positive quality of these descriptive labels may have the effect of masking the shortcomings of the proposed solutions. A 2010 *Washington Post* article is consistent with the findings of Wu, Mintz, Wang, & Arora regarding promises of clean or green energy, suggesting widespread and intentional deceptive communicative practices. The article provides "a typical example of the hype, from one of President Obama's speeches about BP, 'The

tragedy unfolding on our coast is the most painful and powerful reminder yet that the time to embrace a clean-energy future is now' (Sloan, 2010, p. A10). The article describes green energy as "promoted endlessly" and "oversold" and decades away from making a major contribution toward energy independence (Sloan, p. A10).

The data reveals a discursive struggle during the 2000s. A massive volume of public discussion regarding solutions promoted as green or clean stands in contrast to the slogan "drill baby drill," which emerged as an outcome of the 2008 Republican National Convention. The slogan demanded the opening of the protected Arctic National Wildlife Refuge (ANWR) in Northeastern Alaska to petroleum exploration and for increased petroleum production at other domestic sites. Proposals to allow drilling for oil in the ANWR have created a recurring theme, particularly during the later years of the study period. In a 2005 *Christian Science Monitor* article, John Felmy of the American Petroleum Institute advocates in favor of lifting the ban by suggesting to the voting public and their elected representatives, "look at the facts instead of the rhetoric. Drilling in Alaska would cut imports by five percentage points" (Clayton, p. 1). No evidence is presented within the article to support the claim of a five percentage points reduction in imports; this unsubstantiated statement is an example of the *technology as a black box* metaphor, which demands the reader accept the claim without evidence. The *technology as a black box* metaphor is examined in further detail in section 5*.3.4.3 The Black Box of Technology Metaphor as a Persuasive Strategy*.

3.3.7 Feasibility and Desirability: An Understood Assumption

The feasibility and desirability frame (described in section 3*.2.6 Frame 6: Feasibility and Desirability*) is the least frequently observed frame across all decades. Frequency of observed presence of the feasibility and desirability frame ranges from a low ratio of 4% (3 of 67) of

articles published during the 1980s to a high ratio of 24% (14 of 58) of articles published during the 1970s. The low observed frequencies across all decades may suggest the idea of energy independence is widely accepted as beneficial and possible; this shared understanding diminishes the need for expansive public discussion.

This study acknowledges that an argument can be made to dismiss the feasibility and desirability frame as a minor energy independence frame due to low observed frequencies. Despite the low observed frequencies, the debates regarding the feasibility and desirability of energy independence are among the most passionate, interesting, and informative of all frames, therefore the feasibility and desirability frame is included within the overall framing analysis.

A 1975 *New York Times* article calls the desirability of President Ford's energy plan into question with the observation, "Commentators have begun to question Mr. Ford's premise: that it is desirable to haul down oil imports from what they would be if nothing were done, by a full one million barrels a day this year and by another million barrels by the end of 1977, or two million in all" (Cowan, p. 22). Such challenges introduce the idea of unintended costs or consequences of the pursuit of energy independence.

A 1975 *Wall Street Journal* article describes the proposed federal Energy Independence Authority in unfavorable terms and compares its advocate, President Ford, to other politicians known to support massive and controversial governmental programs to address contemporary issues of national interest. "The President's proposed $100 billion Energy Independence Authority is a grand, sweeping idea worthy of Lyndon Johnson, John Lindsay, and Nelson Rockefeller" (Thinking Big, p. 20). The article employs a parallel paragraph structure to compare the energy plan to other large government initiatives: "if the government would only spend $100 billion on urban renewal, it could build a Great Society; that if it only spent $100 billion on poor

people, it could eliminate poverty; an if it only spent $100 billion on energy research, the United States will have energy independence" (Independence 1979, p. 24). In a variation of if/then logic structure, the series of if/only comparisons link the energy plan to the shared cultural understandings of expensive past government failures.

A 1993 *Washington Post* article reflects on President Nixon's original 1973 call for energy independence, "Those words have a hollow echo today, with the United States importing well over half its oil and increasingly dependent on Middle Eastern suppliers. Most energy analysis say it was never realistic to think the United States, land of the three-car family and 3,000-mile trucking routes, could free itself from foreign oil" (Lippman, p A.12). It is interesting to note this view attributes unfeasibility to behavioral and lifestyle choices rather than a deficit of natural resources or inadequacy of technology. Perspectives on such choices are examined in more detail in the *Chapter 6*: *Energy Independence and American Myths Systems*, particularly in section *6.3.2 Myth 2: America as a self-delusional addict*.

Observed articles from the 2000s decade are presented in a more cynical tone, perhaps in response to more than nearly 30 years accumulated frustration related to energy independence's unfulfilled promise and the perception of ongoing war in Iraq as oil-motivated. A 2005 *Christian Science Monitor* article suggests, "Few believe the US can become completely independent" (Clayton, p. 1).

A 2007 *Wall Street Journal* article asks, "What does 'energy independence' mean for a $13 trillion economy that uses the equivalent of 50 million barrels of oil every day? Is it realistic or achievable? Or is it rhetorical overreach" (Yergin, p. A19)? This same article further observers "It proved much easier to get a man on the moon than to make a nation energy independent" (Yergin, p. A19). As this study details in *Chapter 6: Energy Independence and*

American Myths Systems, the goal of energy independence is repeatedly compared to the Apollo space program's achieved goal, as stated by President Kennedy, of "landing a man on the Moon and returning him safely to the Earth" (Miller Center, 1961). Yergin's dismissal of the comparison of energy independence to the Apollo program is noteworthy in its conflict with the *indomitable American Spirit myth* that will be introduced in section *6.3.1 Myth 1: The indomitable American spirit*.

A 2010 *Washington Post* article is the lone observed example in the framing analysis in which feasibility or desirability of energy independence is the dominant frame. Beginning with the headline "Magical thinking is not an energy strategy," the article establishes energy independence as wishful rather than realistic thinking. The article reaches the conclusion, "It's much easier to look for a magic solution than it is to adapt to reality" (Sloan, p. A10).

The feasibility and desirability frame is fundamental and essential to the entire energy independence discussion. If there no public disagreement exists regarding feasibility or desirability, discussions would likely focus on either how to most effectively achieve energy independence or the discussions would disappear entirely. Absence of the feasibility and desirability frame affects not only the frame itself, but also all other frames, communicative functions, and comment sources.

3.3.7.1 Feasibility and desirability rhetoric as an enthymeme

A premise of the section title 3.*3.7 Feasibility and Desirability: An Understood Assumption* is part of the energy independence argument is assumed and unstated. To examine this notion in more detail, feasibility and desirability are subjected to analysis as enthymemes, as follows:

Feasibility Enthymeme

- Major premise – assumed: The *indomitable American spirit myth* (detailed in section *6.3.1 Myth 1: The indomitable American spirit*) suggests Americans can do anything they set their minds to.
- Minor premise - stated: Americans can set their mind to achieving energy independence
- Conclusion – stated: Therefore energy independence is feasible

Desirable Enthymeme

- Major premise – assumed: A state of independence is widely preferred compared to dependence
- Minor premise - stated: Energy independence is a form of independence
- Conclusion – stated: Therefore, energy independence is desirable

3.4 Framing Analysis Conclusions

The framing analysis identified six frames related to energy independence: economic considerations, specific solutions, national security, international relations, environmental concerns, and feasibility and desirability. The most frequently observed frame during the 1970s and 1980s is economic considerations, one of several frames that aim to assert the necessity of energy independence. During the 1990s and 2000s, the specific solutions frame – which presumes necessity - emerges as the most frequently observed frame. Establishment of necessity followed by presumption of necessity adheres to a logical frame progression.

The notion of free markets occupies a prominent position and preferred status in American society. The influence of free markets is observed in several of the frames related to energy independence; the widely understood and accepted premises of free markets provide a

framework for arguments in support of or, more frequently, in opposition to energy independence proposals.

Though it does not rival the frequency of the economic considerations or specific solutions frames, the national security frame is observed with remarkably stable frequency across all decades. Such stability suggests continual concern for national security but is not perceived as the most important societal concern. It is interesting to note that the national security frame in inherently negative in that it addresses risk and fear of loss of the preferred condition rather than aspiration for an unrealized improved condition.

If independence is the preferred condition, then discussion of energy dependence begins with the premise that relationships with oil producing countries are typically not optimal. The observed use of contentious lexical choices, a distinguishing characteristic of the international relations frame, supports the premise. Descriptions such as “oil blackmail” and “take advantage of us” endow imported energy (and, by extension, energy producing nations) with a sinister quality rather than a neutral quality typically associated with commodities.

Observed frequency of the environmental frame increased dramatically over time, attributable in part to the change in prominence of coal as an energy independence solution. A favored remedy during the 1970s, the emphasis on coal declined while environmental awareness increased; the environmental frame emerged as one of the most frequently observed frames during the 1990s and 2000s.

Although feasibility and desirability is the least frequently observed frame across the study period, it is essential to the entire energy independence discussion. Absence of the feasibility and desirability frame affects all other frames, communicative functions, and comment sources.

Chapter 4: Communicative Functions of Energy Independence

4.1 Communicative Functions Overview, Objectives, and Approach

Objectives of the communicative functions portion of the study include identification, examination, and analysis of the purposes served through the use of the phrase energy independence. Using the same approach detailed *Chapter 3: Energy Independence Framing Analysis,* the communicative functions portion of the study considers frequency analysis through coding of the full set of 400 articles and discourse analysis methods applied to the 16-article subset.

Frequencies are measured for each of the five communicative functions identified. Category frequency descriptions are defined as follows:

- Stable frequency: the average observed presence of a specific communicative function, measured as a percentage of data set articles published within a specific decade, is within a ten-percentage point range across all decades of the study period.
- Increasing frequency: the average observed presence of a specific communicative function, measured as a percentage of data set articles published within a specific decade, consistently exhibits an increasing or rising pattern across all decades of the study period.
- Decreasing frequency: the average observed presence of a specific communicative function, measured as a percentage of data set articles published within a specific decade, consistently exhibits a decreasing or declining pattern across all decades of the study period.

- Low frequency: the average observed presence of a specific communicative function, measured as a percentage of data set articles published within a specific decade, is less than 15%.
- Moderate frequency: the average observed presence of a specific communicative function, measured as a percentage of data set articles published within a specific decade, is within the range of 15% to 35%.
- High frequency the average observed presence of a specific communicative function, measured as a percentage of data set articles published within a specific decade, is greater than 35%.

4.1.1 Research Questions

The communicative functions portion of the content analysis seeks to address the research questions:

1. What communicative functions does the phrase energy independence serve?
2. Of the communicative functions identified, which are the most recurring, persistent, and enduring?
3. Do the communicative functions of the phrase energy independence align to sub periods of the overall study?

4.2 Identified Communicative Functions Operational Definitions

Six communicative functions were identified and defined through examination of the data to address communicative functions research question 1.

4.2.1 Communicative Function 1: Specific Solutions

The specific solutions communicative function of the phrase energy independence serves to propose, promote, or oppose specific solutions such as increased production of fossil fuels, increased research and development of alternative fuels, or improved efficiency standards.

4.2.2 Communicative Function 2: Political Campaign

The political campaign function of the phrase energy independence promotes, opposes or is related to a political campaign. A campaign platform may not include references to energy independence, may include minimal references to energy independence as a perceived political requirement, or energy independence may be assigned a more prominent role in campaign strategy.

4.2.3 Communicative Function 3: Government Actions

The government actions communicative function uses the phrase to support, oppose or is related to proposed legislation or government programs/investment related to energy independence. Indicators of the government actions communicative function include direct references to energy-related legislation, policy, subsidies, or price controls.

4.2.4 Communicative Function 4: Emotional Response

The emotional response communicative function of the phrase energy independence serves to evoke an emotional response such national pride, fear of instability, or anger/disappointment at missed opportunities. Such emotional response may bypass evidence-based persuasive arguments and enable unsupported or expedited adoptions of a particular point of view.

4.2.5 Communicative Function 5: Diminish Discussion

The diminish discussion communicative function of the phrase energy independence seeks to avoid, suppress, or dismiss expansive discussion and exploration of specific solutions.

4.3 Notable Communicative Functions Frequency Patterns

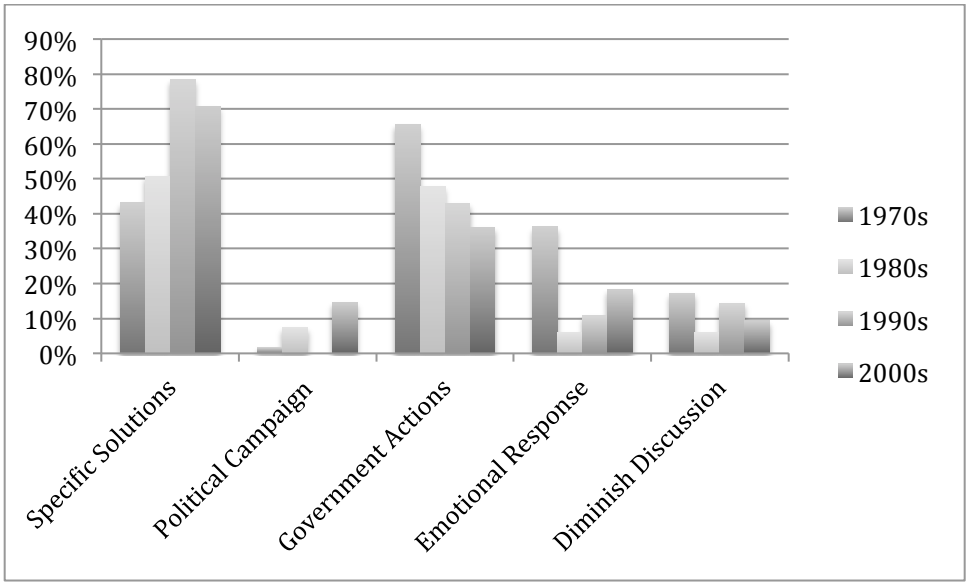
4.3.1 Frequency of Observed Communicative Functions Across the Study Period

Prior to detailed discussion of each observed communicative function separately, it is informative to compare observed frequencies of all communicative functions for the full study period and full data set. As visually demonstrated in *Table 4.3.1.1 Observed Frequency of Communicative Functions by Decade* and *Chart 4.3.1.2 Observed Frequency of Communicative Functions by Decade*, the government actions function is observed most frequently among all communicative functions during the 1970s. The specific solutions communicative function takes the lead observed frequency position during the 1980s, 1990s, and 2000s. The political campaign communicative function is the most infrequently observed communicative function in all decades except during the 1980s; the emotional response communicative function is the most infrequently observed communicative functions during the 1980s.

Table 4.3.1.1 Observed Frequency of Communicative Functions by Decade

Decade	Function 1: Specific Solutions	Function 2: Political Campaign	Function 3: Government Actions	Function 4: Emotional Response	Function 5: Diminish Discussion
1970s	43% (25 of 58)	2% (1 of 58)	66% (38 of 58)	36% (21 of 58)	17% (10 of 58)
1980s	51% (34 of 67)	7% (5 of 67)	48% (32 of 67)	6% (4 of 67)	6% (4 of 67)
1990s	79% (22 of 28)	0% (0 of 28)	43% (12 of 28)	11% (3 of 28)	14% (4 of 28)
2000s	71% (175 of 247)	15% (36 of 247)	36% (89 of 247)	18% (45 of 247)	9% (23 of 247)
Total/Average	64% (256 of 400)	11% (42 of 400)	43% (171 of 400)	18% (73 of 400)	10% (41 of 400)

Chart 4.3.1.2 Observed Frequency of Communicative Functions by Decade



4.3.2 Specific Solutions Communicative Function Analysis

Specific solutions is the most widely observed communicative function overall and leads communicative function frequencies for all decades except the 1970s; the specific solutions communicative function ranked second in frequency during the 1970s. Observed presence of the specific solutions function is notably higher in the 1990s and 2000s compared to the 1970s and 1980s, likely attributable to improved technical viability of a wider range of solutions. The lower observed frequency in the 1970s may be attributable to general unpreparedness for the oil shock of 1973 and absence of readily available solutions.

4.3.3 Political Campaign Communicative Function: An Unexpected Outcome

The political campaign communicative function is the most infrequently observed function overall and is the most infrequently observed function in the 1970s, 1990s, 2000s and is the second most frequently observed function in the 1980s. This is an unexpected outcome

because a politician, President Nixon, first introduced the phrase into public discussion. In an earlier unpublished study, the researcher identified energy independence quotations from all seven of Nixon's successors, which suggests politicians view references to energy independence as politically convenient or necessary. Insight into this surprising result may be found in distinguishing between *Communicative Function 2: Political Campaign,* defined as promotion of, opposition to, or related to a political campaign compared to *Comment Source 1: Politician*, defined as observed instances of a politician making a statement (a direct quote or attributed paraphrased comments) related to energy independence. A possible explanation for the conflict in observed frequencies may be politicians are repeated users of the phrase 'energy independence,' but not necessarily as part of a political campaign. *Communicative Function 2: Political Campaign* is observed in lower frequencies, in the range of 2% to 15% throughout the study period, compared to *Comment Source 1: Politician,* which is observed in higher frequencies of 46% to 56% throughout the study period. *Comment Source 1:* Politician is addressed in further detail in *Chapter 5: Comment Sources of Energy Independence.*

4.3.3.1 Alternate patterns for discussions of ethanol during presidential campaigns

Before transitioning to analysis of other communicative functions of energy independence, it is necessary to briefly address a peculiarity of American presidential politics that may affect the frequency of *Communicative Function 2: Political Campaign* in certain contexts. Specifically, discussion of ethanol as means toward energy independence may be an exception to the low observed frequency pattern of *Communicative Function 2: Political Campaign*. Public discussions of ethanol, particularly corn ethanol, are often accompanied by political campaign complexities. An important product to the Iowa economy, expressed political support for ethanol is a

perceived demand upon presidential candidates seeking a favorable outcome in the Iowa caucuses, the first major electoral primary event in the nominating process for President of the United States. Candidates frequently perceive endorsement of ethanol as essential to early campaign survival. The political power of ethanol is captured vividly in a 1995 *Wall Street Journal* article, "Politicians for years have talked about ethanol as if it were holy water" and "Ethanol has long been hyped as part of a national strategy of energy independence." (Bovard, p. 18). Campaign comments and promises in support of ethanol are often packaged in populist communicative packages expressing support for family farmers, such as in a media release from Senator Dole: "Encouraging the use of clean-burning ethanol makes good sense for the environment, and makes for common sense farm policy by helping American farmers who grow commodities used to make ethanol" (Dole Archive, 1990). The same *Wall Street Journal* article provides insight into ethanol's powerful role in presidential politics, "The ethanol issue could win Iowa for Sen. Dole -- and cost him much of the rest of the nation" (Bovard, p. A18).

Support of ethanol as a fuel is consistently observed despite a persistent alternate discourse that suggests ethanol is not a technically preferable solution. The same 1995 *Wall Street Journal* article cites a 1986 Agriculture Department study that discredits ethanol subsidies; "Consumers would be much better off if they burned straight gasoline in their automobiles and paid a direct cash subsidy to farmers in the amount that net farm income would be increased by ethanol production" (Bovard, p. A18).

4.3.4 Government Actions Communicative Function

An important communicative function of the phrase energy independence is to influence government actions, policy, and legislation. Discussions within the government actions

communicative function call upon the public to consider solutions proposed by elected representatives or for elected representatives to consider measures designed to address energy concerns, such as a 2005 *Christian Science Monitor* article which calls for "the most radical rethink of energy policy since the 1970s " (Clayton, p. 1).

Discussions promoting government actions to achieve energy independence are in conflict with the belief system of free markets advocates, who express a preference for very limited or complete absence of price altering government actions, controls, or mechanisms such as regulation, tariffs, subsidies, and quotas. Free markets, as a component of essential American identity, are explored in detail within in *Chapter 3: Energy Independence Framing Analysis* chapter. Despite the conflict, demands for government actions persist throughout the study period, particularly during the 1970s, likely due to major energy-related federal legislation promoted by each of the presidential administrations of the decade. The frequency of the government action communicative function steadily declines each decade, ranging from a low of 36% (89 of 247) of articles published during the 2000s to a high of 66% (38 of 58) of articles published during the 1970s. The observation of steadily decling frequencies of the government actions communicative function is supported by one-way ANOVA Tukey tests, which reject the null hypothesis that government actions communicative function is unrelated to decade, with statistically significant differences between the observed frequencies of the government actions communicative function in the 1970s compared to 2000s.

4.3.4.1 The *divided we fail* trope within the government actions function

The path to consensus is often challenging, sometimes resulting in political gridlock that inhibits government action. Objections to such debilitating gridlock may manifest as the *divided we fail* trope, which suggests absence of common priorities undermines the

national interest. The *divided we fail* trope traces its roots in American history to Benjamin Franklin's *Join or Die* political cartoon depicting a snake severed into eight segments, representing disjoined colonies. The historical precedent of the *divided we fail* trope is also evident in Abraham Lincoln's observation regarding national disunity; "a house divided against itself cannot stand" (U.S. History, 1995-2013).

The *divided we fail trope* is observed in a 1987 *Wall Street Journal* article, American Petroleum Institute president Charles DiBona complains of government inaction, "You have to ask why they don't do something" (p. 1). In the same article, Eli Bergman of the advocacy group Americans for Energy Independences concurs, "we aren't doing anything to make foreign oil less important" (p. 1).

4.3.4.2 The government actions function and contentious politics

A 1993 *Washington Post* article recalls the proposed government action of gasoline rations in the wake of the 1973 oil embargo. "Bankers and politicians called for gasoline rationing; and although rationing was not imposed, the federal government let it be known that ration coupons had been printed, in an effort to win voluntary reductions in gasoline consumption" (Lipmann, 1993, p. A12). Rationing was a particularly contentious proposed government action, as demonstrated through a 1975 *New York Times* article that dramatically warned, "rationing may mean years of lines at the pump, a new government bureaucracy, some economic drag and perhaps, after all, no general sense of fair sharing" (Cowan, p. 22).

A 1975 *Wall Street Journal* article critically examines the politics of President Ford's energy proposal. Lexical choices including "impetuosity" depict Ford's plan as capricious and out of character (Thinking Big, p. 20). The plan is described as subject to

the "whims and fancies" of unspecified bureaucrats and was adopted "in one swoop." These word choices serve to discredit the plan while refraining from a direct attack on President Ford. While describing the energy plan is an "horrendous mistake," the article recognizes this behavior is "uncharacteristic of his thinking during a quarter-century of public life" and even asks, "whatever happened to Jerry Ford," in reference to Ford's departure from past political behaviors. The greater portion of the blame is assigned to Vice President Rockefeller, who "sold this big idea to Mr. Ford." President Ford is presented as "able to swallow this idea" while his economic advisors "choked on it," positioning him as a victim of his Vice President rather than the holder of ultimate responsibility.

4.3.5 Emotional Response Communicative Function Analysis.

The observed frequency of the emotional response communicative function is substantially higher in the 1970s (36% or 21 of 58 observed articles published) compared to other decades, perhaps due to international petroleum shortages in 1973-1974 and 1979, widely described as the first two oil shocks or crises. The 1970s is the only decade to include two of these crises, marked by inflationary commodity and consumer energy prices. The 1973 crisis in particular had no historical precedent; with a lack of existing political, industrial, or scientific responses to reference, emotional response was likely the most readily available response available in the 1970s (U.S. Department of Energy, 2013).

4.3.5.1 Emotional response prompted through metaphor and lexical choices

A 1991 *Christian Science Monitor* article argues against an increase in Corporate Average Fuel Economy (CAFE) standards for motor vehicles with a blend of nationalism and provocation of an emotional response. The article views Japanese automobile

manufacturers unfavorably, equating the CAFE standards with "a new assault by the Japanese," implicitly suggesting that both the CAFE standards and Japanese auto imports are a threat to the American automobile industry. "New assault" is a particularly aggressive lexical choice, bordering on ethnic hatred and allegations of violent disposition. Later in the article, the writer again refers to these manufacturers as "the Japanese" rather than "Japanese auto manufacturers" (Eisenstein, p. 6). Lakoff and Johnson (1980) categorize this type of metaphor as institution for people responsible (p. 38). The institution for people responsible metaphor produces a dehumanizing effect and, in this case, contributes to an existing history of racial tensions in the United States.

A 1995 *Wall Street Journal* article employs the curious lexical choice of boondoggle to prompt an emotional response through the headline "Dole, Gingrich, and the big ethanol boondoggle" (Bovard, p. A18). Boondoggle is an unusual word choice for the *Wall Street Journal* at the time of publication. A Lexis Nexis search on "boondoggle" usage in this publication within the date range January 1, 1995 to December 31, 1995 yielded five results. The choice of "boondoggle" rather than a dictionary definition seems to be an emotional persuasive appeal rather than a factual persuasive appeal, as demonstrated through substitution of "waste of time and money" in the following example from the article headline: "Dole, Gingrich and the big ethanol boondoggle (*substitute waste of time and money*); ethanol is as much a boondoggle (*substitute waste of time and money*) now as during the Carter administration" (Bovard, p. A18).

4.3.6 Diminish Discussions Communicative Function Analysis

Frequency of observed presence of the diminish discussion communicative function ranges from a low of 6% (4 of 67) of articles published during the 1980s to a high of 17% (10 of

58) of articles published during the 2000s. Frequency does not adhere to an increasing, decreasing, or consistent pattern across the decades. This observation is supported by one-way ANOVA Tukey tests, which fail to reject the null hypothesis that the diminish discussion communicative function is unrelated to decade, with no statistically significant differences between the frequency of observed presence of the diminish discussion communicative function among any of the decades.

The diminish discussion communicative function may manifest through necessity arguments, as in a 1996 *New York Times* article in which several consumers repeatedly reference the need to drive, citing justifications such as job duties, non-suitability of roads for pedestrian or bicycle traffic, and lack of public transportation. Variations of the necessity argument are identified, including "my job depends on travel to meetings," "I have to drive, no matter what it costs," and "I have no choice but to drive something (referring to a large, fuel inefficient vehicle) that has the space I need" (Salpukas, p. 1). The collective argument of these quoted individuals can be paraphrased as: our lives demand motor vehicle use; we can't do anything about it, so don't hold us accountable, and there is no need to further discuss the subject.

The diminish discussion communicative function may manifest as part of free markets arguments. For example, a 1975 *Wall Street Journal* article is dismissive through the observation "the only real solution can come through sound private capital market and less government interference" (Thinking Big, p. 20). A 1983 *Christian Science Monitor* article offers another example suggesting that promoters of free market philosophy typically prefer to diminish discussions of energy independence: The (Reagan) administration praises the free market, and says the government's role should be as small as possible. The White House has completed the

decontrol of oil prices begun under President Carter, cut federal funds for developing solar and other renewable resources, and advocates decontrol of natural gas" (Grier, p. 22).

The diminish discussion communicative function is observed in a 2010 *Washington Post* article that suggests, "Alas, the energy independence thing hasn't exactly worked out. In fact, things have gotten seriously worse" (Sloan, p. A10).

4.4 Communicative Functions Analysis Conclusions

The communicative functions analysis identified five functions related to energy independence: specific solutions, political campaign, government actions, emotional response, and diminish discussion.

The specific solutions communicative function is the most prominent of all observed communicative functions for most of the study period, suggesting a preference for discussion of tangible results. There may be a linkage with the government action communicative function, which considers proposals for government intervention that may lead to specific solutions. The government actions communicative function is in conflict with the minimal intervention ideal of free markets yet is consistently among the top observed frequencies. American preferences are divided between achievement through focused collective effort and achievement through the vast resources of the U.S. government. Achievement through focused collective effort is addressed the *Chapter 6: Energy Independence and American Myth Systems* as part of the discussion of the *indomitable American Spirit* myth.

With the exception of the emotional response communicative function during the 1970s, the emotional response during the 1980s-2000s, political campaign, and diminish discussion communicative functions are all observed in frequencies of less than 20% of articles published

during each decade. Despite the limited observed frequencies, data supports some interesting conclusions.

The *Communicative Function 2: Political Campaign* is observed in surprisingly low frequency and in possible conflict with comparatively higher observed frequency of the *Comment Source 1: Politician* addressed in *Chapter 5: Comment Sources of Energy Independence*. A possible explanation is politicians are frequent users of the phrase 'energy independence,' but the data suggest they don't necessarily frequently use the phrase as part of their campaigns for office.

Discussions of ethanol as a specific solution within presidential primary campaigns are subject to separate and specific political practices and demands not observed within any other energy-related discussions during these campaigns.

Chapter 5: Comment Sources of Energy Independence

5.1 Comment Sources Overview, Objectives, and Approach

Objectives of the comment sources portion of the study include identification, examination, and analysis of the purposes served through the use of the phrase energy independence. Using the same approach detailed in *Chapter 3: Energy Independence Framing Analysis*, the comment sources portion of the study considers frequency analysis through coding of the full set of 400 articles and discourse analysis methods applied to the 16-article subset.

Frequencies are measured for each of the five comment sources identified. Category frequency descriptions are defined as follows:

- Stable frequency: the average observed presence of a specific comment source, measured as a percentage of data set articles published within a specific decade, is within a ten-percentage point range across all decades of the study period.
- Increasing frequency: the average observed presence of a specific comment source, measured as a percentage of data set articles published within a specific decade, consistently exhibits an increasing or rising pattern across all decades of the study period.
- Decreasing frequency: the average observed presence of a specific comment source, measured as a percentage of data set articles published within a specific decade, consistently exhibits a decreasing or declining pattern across all decades of the study period.
- Low frequency: the average observed presence of a specific comment source, measured as a percentage of data set articles published within a specific decade, is less than 15%.

- Moderate frequency: the average observed presence of a specific comment source, measured as a percentage of data set articles published within a specific decade, is within the range of 15% to 35%.
- High frequency the average observed presence of a specific comment source, measured as a percentage of data set articles published within a specific decade, is greater than 35%.

5.1.1 Comment Sources Research Questions

The comment sources portion of the content analysis examines quotations observed within the data set to address the following research questions:

1. What categories of speakers are sources of comments or references to energy independence?
2. Do the frequencies of comment source categories align to sub periods of the overall study?
3. Do the comment sources of the phrase energy independence align to sub periods of the overall study?

5.2 Identified Comment Sources Operational Definitions

Five comment sources were identified and defined through examination of the data to address comment sources research question 1.

5.2.1 Comment Source 1: Politician

The politician comment source observes instances of a politician making a statement (a direct quote or attributed paraphrased comments) related to energy independence. Politician is defined as a candidate for elected office or an elected office incumbent, or a spokesperson representing the opinions of a politician.

5.2.2 Comment Source 2: Government Agency

The government agency comment source observes instances of a representative of a government agency, defined as a non-elected employee or appointee working for a government agency or department, making a statement (direct quote or attributed paraphrased comments) related to energy independence.

5.2.3 Comment Source 3: Industry

The industry comment source observes instances of a representative of a commercial enterprise, industry coalition, or organized labor making a statement (direct quote or attributed paraphrased comments) related to energy independence.

5.2.4 Comment Source 4: Advocacy Group

The advocacy group comment source observes instances of a representative of an advocacy group making a statement (direct quote or attributed paraphrased comments) related to energy independence.

5.2.5 Comment Source 5: Academic

The academic comment source observes instances of an academic making a statement (direct quote or attributed paraphrased comments) related to energy independence.

5.3 Notable Comment Sources Patterns

5.3.1 Frequency of Observed Comment Sources Across the Study Period

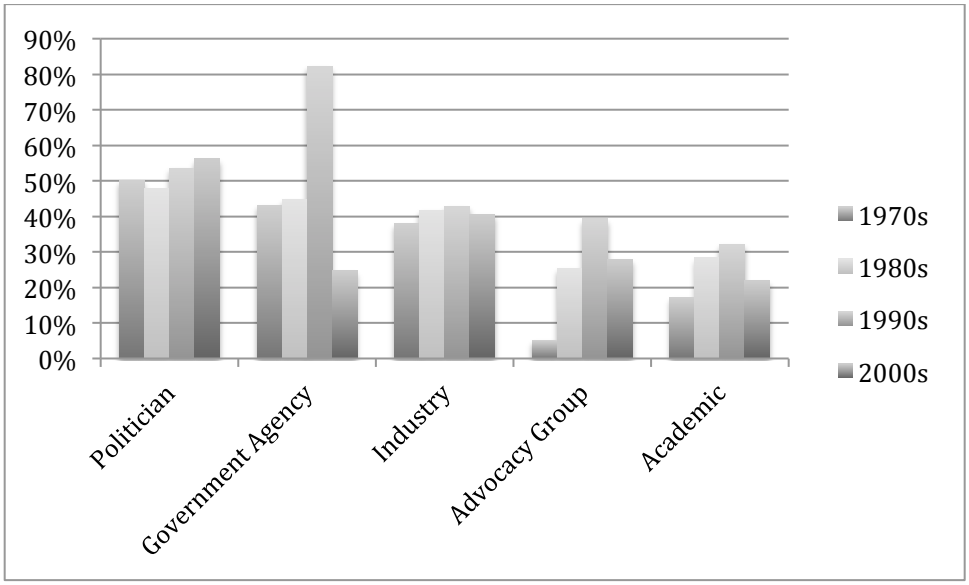
Prior to detailed discussion of each observed comment source separately, it is informative to compare observed frequencies of all comment sources for the full study period and full data set. As visually demonstrated in *Table 5.3.1.1 Observed Frequency of Comment Sources by Decade* and *Chart 5.3.1.2 Observed Frequency of Comment Sources by Decade*, the politician comment source is observed most frequently among all comment sources during the 1970s,

1980s, and 2000s. The government agency comment source takes the lead observed frequency position during the 1990s. The advocacy group comment source is the most infrequently observed comment source during the 1970s and 1980s; the academic comment source is the most infrequently observed comment source during the 1990s and 2000s.

Table 5.3.1.1 Observed Frequency of Comment Sources by Decade

Decade	Comment Source 1: Politician	Comment Source 2: Government Agency	Comment Source 3: Industry	Comment Source 4: Advocacy Group	Comment Source 5: Academic
1970s	50% (29 of 58)	43% (25 of 58)	38% (22 of 58)	5% (3 of 58)	17% (10 of 58)
1980s	48% (32 of 67)	45% (30 of 67)	42% (28 of 67)	25% (17 of 67)	28% (19 of 67)
1990s	54% (15 of 28)	82% (23 of 28)	43% (12 of 28)	39% (11 of 28)	32% (9 of 28)
2000s	56% (139 of 247)	25% (61 of 247)	40% (100 of 247)	28% (69 of 247)	22% (54 of 247)
Total/Average	46% (185 of 400)	32% (129 of 400)	41% (162 of 400)	25% (100 of 400)	23% (92 of 400)

Chart 5.3.1.2 Observed Frequency of Comment Sources by Decade



5.3.2 Politicians: A Stable Source of Comments Related to Energy Independence

Observed frequency of politicians as a source of energy independence comments is consistent across all decades, suggesting politicians typically perceive the same level of need or a persuasive advantage to discussing energy regardless of time period. This observation is supported by one-way ANOVA Tukey tests, which fail to reject the null hypothesis that politician comment source is unrelated to decade, with no statistically significant differences between the frequency of observed presence of the politician comment source in any decade.

Frequency of observed presence of the politician comment source ranges from a low of 48% (29 of 58) of articles published during the 1980s to a high of 56% (139 of 247) of articles published during the 2000s. The modest decline in frequency in the 1980s may be attributable to a perceived reduced political need to discuss energy independence during a period of surplus supply of oil and rapidly falling energy prices, as was the case during latter years of the decade.

Although frequency of observed presence is stable across decades, the tone adopted by politicians may have shifted over time. In the 1970s examples, politicians expressed optimism in terms of setting transformative energy objectives and envisioning a broad range of energy sources as alternatives to imported oil. In the 1980s examples, political voices are more negative, alleging mishandling of specific programs and absence of effective energy policy. The 2000s examples are split between lament for missed opportunities and view toward the future through unspecified clean energy solutions.

5.3.2.1 Politician Comment Source 1970s: *Promise of a Bright Future* Metaphor

Though published in 1993, a *Washington Post* article restates and reflects upon President Nixon's 1973 call to action that launched the energy independence era. For the purposes of considering shifts in tone, the quotation attributed to Nixon is treated as a 1970s

comment source. “Let us set as our national goal, in the spirit of Apollo with the determination of the Manhattan project, that by the end of this decade we will have developed the potential to meet our own energy needs without depending on any foreign energy source” (Lippman, p. A12). With inspirational language, President Ford is quoted in a 1975 *Wall Street Journal* article promoting his energy plan by suggesting, “My vision is of dramatic action to produce oil and gas from coal, safe and clean nuclear and coal-generated electric power, harness the energy of the sun and the natural heat within the earth and build numerous other energy facilities” (Thinking Big, p. 20). Both Nixon’s and Ford’s persuasive appeals engage the *promise of bright future* metaphor, which expresses optimism, hope, and promise.

5.3.2.2 Politician Comment Source 1980s-2000s: *The Future that Could Have Been* Trope

The inspirational, optimistic energy independence appeals of the 1970s yielded to expressions of frustration in the 1980s and beyond. Indicators include reprimands for past inaction or improper action, with the suggestion that the current state of energy independence could have been improved if not for past political weakness or incompetence.

Criticism or assignment of blame is an important element of *the future that could have been* trope, which may be directed at a specific individual such as U.S. Representative John Dingell’s description of President Reagan’s handling of energy policy as a “do nothing approach” to prepare for “the next energy crisis” (Taylor, 1987, p. 1). The criticism or assignment of blame could avoid personal attack, as in a 2005 *Christian Science Monitor* article, in which former U.S. Senator Timothy Worth observes “It’s one

of the great failures of American politics and policy that we are so dependent on oil from one of the most corrupt and unstable areas of the world" (Clayton, p. 1).

In a 2010 *Washington Post* article, President Obama refrains from direct assignment of blame, but suggests inadequate emphasis on unspecified clean energy technologies indirectly contributed to the environmental disaster of the Deepwater Horizon oil spill in the Gulf of Mexico: "The tragedy unfolding on our coast is the most powerful reminder yet that the time to embrace a clean-energy future is now" (Sloan, p. A10).

5.3.3 Government Agency Comment Source Analysis

Frequency of observed presence of the government agency comment source ranges from a low of 25% (61 of 247) of articles published during the 2000s to a substantial spike to a high of 82% (23 of 28) of articles published during the 1990s. One-way ANOVA Tukey tests reject the null hypothesis that government agency comment source is unrelated to decade, with statistically significant differences between the frequency of observed presence of the government agency comment source during the 1970s and 1980s compared to 2000s.

The wide frequency range is not the only disparate characteristic of the government agency comment source, as demonstrated in a comparison of comments from two cabinet-level heads of federal departments. In a 1975 *New York Times* article, Secretary of State Henry Kissinger dramatically promotes the Ford Administration's energy plan by stating, "Either we lead, or no one leads." (Cowan, p. 22). As noted in *Chapter 3: Energy Independence Framing Analysis*, Secretary of the Interior Donald Hodel suggests in a 1987 *New York Times* article that lack of progress toward energy independence is the equivalent of telling oil-producing countries "Take advantage of us, we're not going to defend ourselves" (Taylor, p. 1).

5.3.4 The Stable Voice of Industry as a Comment Source

Comments from representatives of economic entities are stable in frequency, suggesting an ever-present determination to influence energy policy and public opinion through persuasive appeals. Frequency of observed presence of the industry comment source across decades is contained within a narrow range of five percentage points, from a low of 38% (22 of 58) of articles published during the 1970s to a high of 43% (12 of 28) of articles published during the 1990s. Statistical analysis supports the observation that the voice of industry is consistently an active participant in the energy independence discussion. One-way ANOVA Tukey tests fail to reject the null hypothesis that industry comment source is unrelated to decade, with no statistically significant differences between the frequencies of observed presence of the industry comment source among any decades.

Industry comment sources adopted several persuasive strategies, as detailed in the following subsections.

5.3.4.1 Disdain as a persuasive strategy

The study observed several examples of industrial comment sources expressing disdain as a persuasive strategy, as demonstrated in the following examples.

In a 1984 *New York Times* article, Carl E. Bagge of the National Coal Association responds to widespread belief that coal is a pollutant, calling such accusations “simplistic zealotry” (Diamond, section 1 p. 35).

In a *1987 New York Times* article, Charles DiBona of the American Petroleum Institute observes, “In this country, we tend to deal with the immediate crisis, not the long-term problem” (Taylor, p. 1).

In a 2005 *Christian Science Monitor* article, John Felmy of the American Petroleum Institute weighs in on the debate of drilling in the protected Arctic National Wildlife Refuge (ANWR); "You've got to look at the facts instead of the rhetoric. Drilling in Alaska would cut imports by five percentage points" (Clayton, p. 1).

The expression of disdain functions as an attack on the opposing point of view, often embedded in confrontational and dismissive language designed to evoke an emotional response rather than evidence-supported persuasive reasoning.

5.3.4.2 Fear as a persuasive strategy

A 1991 *Christian Science Monitor* article voices opposition to proposed increases in federally regulated Corporate Average Fuel Economy (CAFE) motor vehicle efficiency standards through the viewpoint of automobile manufacturers. Ford Motor Company chairman Harold Poling exploits the fears of individuals who prefer larger cars, warning if the proposed fuel standards bill becomes law, his company's "largest car would probably be no bigger than today's compact Ford Tempo" (Eisenstein, p. 6). Similarly, a product planning manager at Toyota exploits the fears of luxury car buyers with the threat of abandoning Lexus models to "essentially become a Tercel and Corolla car company" (Eisenstein, p. 6).

Fear-based persuasion may be observed on a more dramatic scale than the threat of discontinuation of production of specific car models. International relations are an excellent source of fear appeals. A 1983 *Christian Science Monitor* article engages international-scale fears through the observation "If Iran makes good on its tough talk and plugs the Gulf, Western economies could plunge into a dramatic economic decline" (Grier p. 22).

5.3.4.3 The black box of technology metaphor as a persuasive strategy

Industry comment sources refer to technology to both promote and oppose proposals to further energy independence. The technology referenced is typically not described in detail, nor are reasons typically offered regarding why the technology will or will not support the proposal. The capabilities of technology are simply declared, without substantiation. The comment source implicitly demands the reader to accept a particular opinion of technology without evidence. Using the lexicon of technology, the comment source demands the reader submit to the *black box* metaphor, in which input and output can be observed but internal mechanisms that convert input to output are unavailable for inspection or understanding except by an elite group of experts.

Tom Hanna of the Motor Vehicle Manufacturers Association (MVMA) employs the *technology as a black box* metaphor to describe a proposed increase in efficiency standards as "unachievable with any known technology" (Eisenstein, p. 6).

Similarly, a 1996 *New York Times* article, Ms. Trench of the Petroleum Industry Research Foundation cites, "a panoply of new technologies" that enables "stunningly responsive" solutions to shortages. (Salpukas, Section D p.1). These examples demonstrate that references to technology are often exempt from validating scrutiny, thus offering enhanced persuasive power. Harvey (2003) describes the human habit of fetishism of objects or entities, particularly technologies, with "self-contained, mysterious, and even magical powers to move and shape the world in distinctive way" (p. 3). Such fetishizing attaches disproportionate importance to technologies and "endow(s) technologies – mere things – with powers they do not have (e.g. the ability to solve social problems, to keep the economy vibrant, or provide us with a superior life" (Harvey, 2003, p. 3). Fetishizing

of technologies enables producers of content to bypass the requirement for supporting evidence that is typically present in persuasive arguments.

5.3.5 Advocacy Group Comment Source Analysis

Frequency of observed presence of the advocacy group comment source ranges are among the lowest observed frequencies of all comment sources, particularly during the 1970s (5% or 3 of 58 of articles published). One-way ANOVA Tukey tests reject the null hypothesis that advocacy group comment source is unrelated to decade, with statistically significant differences between the frequency of observed presence of the advocacy group comment source during the 1970s compared to all other decades and during the 1980s compared to the 1990s.

A common theme among advocacy comment sources is not enough is being done to promote energy independence or the wrong actions are being taken. This theme is an extension of *the future that could have been* trope

In a 1987 *Wall Street Journal* article, Eli Bergman of Americans for Energy Independence, a now defunct advocacy group that promoted alternatives to dependence on foreign oil observes “We aren’t doing anything to make foreign oil less important” (Taylor, p.1).

In a 1987 *New York Times* article, Robert Fri of Resources for the Future observes “Energy is a long-term problem, and quick fixes will do more harm than good. According to the organization’s website, Resources for the Future describes its purpose as “improves environmental and natural resource policymaking worldwide through objective social science research of the highest caliber” (Resources for the Future, 2013).

Two 1990s *Washington Post* articles offer an explanation of the low observed frequency of advocacy group comment source during the 1990s – inexpensive consumer energy prices. Edwin S. Rothschild of Citizen Action observes complacency, “because gasoline is cheap,

everything's fine" (Lippman, p. A12). In the same 1993 *Washington Post* article, Eli Bergman of Americans for Energy Independence notes, "The world is awash in oil and the level of concern is just not what it was" (Lippman, p. A12). Bergman was an active voice in the full data set of 400 articles; this 1993 *Washington Post* article reports the closing of Americans for Energy Independence's Washington offices and the end of the organization's active advocacy (Lippman, p. A12).

5.3.6 Academic Comment Source Analysis

Frequency of observed presence of the academic comment source ranges from a low of 17% (10 of 58) of articles published during the 1970s to a high of 32% (9 of 28) of articles published during the 1990s. One-way ANOVA Tukey tests fail to reject the null hypothesis that the academic comment source is unrelated to decade, with no statistically significant differences between the frequencies of observed presence of the academic comment source among any of the decades.

Similar to the lack of an observable frequency pattern, there is little to connect the diverse comments of the academic comment source into a discursive pattern. There is one thought-provoking comment among a mostly unremarkable collection. A 1987 *Wall Street Journal* includes an observation from Harvard's Irwin Steltzer "I think our (energy) policy is aircraft carriers," suggesting the Reagan Administration prefers military responses in favor of thoughtful policy approaches. Though unrelated to the academic comment source, it is interesting to note another reference to aircraft carriers observed in data from the same decade. A 1983 *Christian Science Monitor* article describes station wagons "as large and thirsty as aircraft carriers" (Grier, 1983, p. 22).

5.4 Comment Sources Analysis Conclusions

The comment sources analysis identified five comment sources related to energy independence: politician, government agency, industry, advocacy group, and academic. Politician is the leading comment source across the full study period and within all decades except the 1990s. Consistent frequency suggests politicians view energy independence as a necessary discussion topic regardless of time period, but the tone is subject to change over time, ranging from inspirationally persuasive appeals that engage the optimistic *promise of a bright future* metaphor to cynical censures that engage the remorseful *future that could have been* metaphor.

Patterns are more challenging to identify within the government agency comment source. It is the most frequently observed comment source during the 1990s, but frequencies in other decades vary widely. Similarly, no notable patterns are observed in the academic content source data.

One of the more interesting observations is found within the stable frequency of the industry content source. Industry sources have cleverly identified a method of bypassing the evidence requirement for persuasive appeals through the *technology as a black box metaphor*, in which input and output can be observed but internal mechanisms that convert input to output are unavailable for inspection or understanding except by an elite group of experts.

With the exception of very low observed frequencies during the 1970s, advocacy groups represent moderate to high comment source frequency in all other decades. Perhaps more revealing than frequency observations is the thematic consistency of the advocacy group comment source, which articulates the idea that not enough is being done or the wrong actions are being taken.

Chapter 6: Energy Independence and American Myth Systems

6.1 Myth Analysis Overview, Objectives, and Approach

Objectives of the discourse analysis portions of this dissertation include identification of myths and connections between myths related to energy independence and illustration of the saturation of the phrase energy independence throughout American society.

The study examined each article of the same 16-article subset identified in the framing, function, and comment source analyses, first individually and then collectively, to identify intertextual recurrences or patterns that serve to introduce or reinforce the idea of energy independence as part of an American myth system. The study examined relationships between expressive choices in news discussions of energy independence, American culture, and self-identity. Findings declare energy independence as resident in the realm of American rhetorical mythologies.

As part of the effort to discover energy independence myths and myth characteristics, the study considered lexicon and message organization, tropes including metaphors and other forms of figurative expression, shared cultural understandings and beliefs, historical comparisons, as well as alternative choices the article authors could have selected.

6.1.1 Myths Research Questions

This chapter seeks to address the following research questions:

1. How has energy independence entered the realm of American rhetorical mythology?
2. What functions does energy independence serve as an embedded myth?

The approach to these research questions is to trace the processes through which expressions and articulations define and redefine understood meanings of energy independence.

6.2 Working With Myths

6.2.1 Myths Synthesis Definition

As a prelude to the identification and analysis of myths specifically related to energy independence, it is necessary to develop a definition of myths. This study builds upon the theoretical insights detailed in section *6.2.3 Myths Literature Review* to propose a synthesis definition of myths:

Myths are enduring systems of persuasive communication within a culture that access and reinforce familiar and socially embedded tropes, perceptions, and beliefs. Myths attempt to explain, simplify, naturalize, divert, or justify complex social phenomena, and function to preserve and extend shared cultural values and understandings. Myths often include powerful emotional components such as nationalism and patriotism and may include thematic narratives that favorably portray and reinforce the collective national ego.

6.2.2 Myth Illustration – The Paradigm Myth of American Exceptionalism

Section 6.3.1 Myth 1: The indomitable American spirit specifically associates energy independence with the belief that Americans, individually or collectively, can achieve anything they set their minds to. This illustrative section examines the related myth from a broader historical perspective and assigns a more widely recognized label – *American exceptionalism*, which suggests America is markedly different and superior than other nations and is distinguished through unique experiences and achievements.

Although the labels *American exceptionalism* and *the indomitable American spirit* may be interchangeable in some contexts, for the purposes of this study they are distinct. The former is distinguished in this study through its service as a model in examining myth components; the

later is distinguished in this study through serving to demonstrate the relationship between a specific myth and energy independence.

6.2.2.1 Applied myth characteristics

As a demonstrative example of how myths function, this section examines key characteristics of myths, derived and abbreviated from the myths synthesis definition articulated in section 6.2.1, and applies these characteristics as guidelines for myth examination. The key myth characteristics include the following:

1. Endurance
2. Broad recognition and acceptance within a culture
3. Representative of the values of a culture
4. Persuasive qualities
5. Emotional components such as nationalism and patriotism.

The myth of *American exceptionalism* persists throughout American history. Examples in this section are drawn from contributing narratives derived from historical events spanning the nascent nationhood through the 21st century, satisfying the endurance characteristic of myth.

An early narrative contributing to the myth of *American exceptionalism* is the American War of Independence, during which an ill-equipped civilian militia of farmers, merchants, craftsmen, and laborers, largely without prior combat experience, training or military infrastructure, banded together to defeat the 18th century equivalent of the world superpower and its mercenary martial allies. The myth narrative has assigned exalted status to the political and military leaders of the War of Independence as evidenced through the collective title, the Founding Fathers. Perhaps the most explicit and extreme

example of such exaltation is found in the symbolism of *The Apotheosis of Washington*, a fresco that adorns the dome of the U.S. Capitol rotunda. The fresco depicts George Washington, accompanied by representations of classical deities, elevated to a god-like status, and displayed at the highest interior physical point of the Capitol. The mythology related to the American War of Independence is highly complex and extends beyond its relationship to *American exceptionalism*. The treatment in this section is limited to demonstrating the deep history of the myth of *American exceptionalism* and its widespread recognition within American culture. An implicit logic of American superiority is embedded in the myth; overcoming a militarily privileged opponent suggests that mere resources are no match for the resilience of the American character. This belief in the ability of America to defeat a better trained and resourced opponent through intangible superiority satisfies the nationalism and patriotism characteristic of myth.

The pattern of narratives contributing to the myth of *American exceptionalism* continued into the 19th century, concurrent with the exploration and development of the Western frontier. This contributing narrative culminates with the notion of Manifest Destiny, the belief that America was destined by the will of God to acquire the lands that now comprise the Western United States. The moral authority of the will of God satisfies the persuasive characteristic of myth.

A 20th century example explicitly declares American superiority. National Security Decision Directive 75 (NSDD 75), the formalization of President Regan's strategy to contain the spread of communism, declares "U.S. policy must have an ideological thrust which clearly affirms the superiority of U.S. and Western values of individual dignity and

freedom, a free press, free trade unions, free enterprise, and political democracy over the repressive features of Soviet Communism" (Natufe, 2013). The freedoms explicitly referenced in NSDD 75 satisfy the cultural values characteristic of myth.

In recent years, foreign leaders such as Russian President Vladimir Putin have been critical of the myth of *American exceptionalism*. Putin recently observed, "It is extremely dangerous to encourage people to see themselves as exceptional, whatever the motivation" (Fisher, 2013). Perhaps criticisms from Putin and other foreign leaders account for counter messaging adopted by multiple contemporary American politicians such as former Massachusetts governor Mitt Romney who observes, "This reorientation away from a celebration of American exceptionalism is misguided and bankrupt" (Tumulty, 2010). Adopting a similar defensive response, former Arkansas governor Mike Huckabee suggests, "To deny American exceptionalism is in essence to deny the heart and soul of this nation" (Tumulty, 2010). Former senator from Pennsylvania Rick Santorum agrees, suggesting, "America is exceptional, and Americans are concerned that there are a group of people in Washington who don't believe that any more." (Tumulty, 2010). The remarkably similar admonitions of perceived lapses as observed by multiple contemporary politicians serves as further evidence of the enduring and widespread political acceptance of the myth of *American exceptionalism*.

6.2.3 Myths Literature Review

The *Energy Independence Frames Analysis* chapter considers frames related to energy independence. As an adjunct to the synthesis definition of myths offered in section *6.2.1 Myths Synthesis Definition*, it is necessary to distinguish the characteristics of frames from myths. Van Gorp's observations are revealing: "These phenomena (stereotypes, values, archetypes, myths,

and narratives) are interwoven with each other but refer to different aspects of a news story" (Van Gorp, 2010, p. 85). Myths are one of a range of culturally shared understandings that contribute to the effectiveness of news frames. As shared understandings, myths are independent of and pre-exist the news story in which they are activated, but when used within a news story myths function to reinforce the limiting frames of the story and thus are subordinate to the frames. This subordinate position does not suggest a weak position. As we will see in the examples within this chapter, myths are indeed powerful communicative forces that help readers quickly process information, connect to the data, and form opinions.

Hertog and McCleod (2010) suggest, "Certain myths, metaphors, and narratives are deeply embedded within the fabric of the culture" (p. 141). As defined by Barthes (1957), myths are "a system of communication" and "a type of speech chosen by history" (pp. 109-110). Condit (1999) proposes the idea of a cultural myth, "a narrative whole which the critic reconstructs from singular texts often separated in time and genre but tied together by a single, unifying theme (p. 526). McGee (1999) defines myths in terms of the "unity and collective identity" that belief in myths creates (p. 347). Lakoff and Johnson (1980) provide insight into why cultures develop and use myths, suggesting our conceptual system "is fundamentally metaphorical in nature" and "what we experience, what we do every day is very much a matter of metaphor" (p. 3). Metaphorical communication is relational, enabling us to understand one thing or idea in terms of an unrelated thing or idea. Chandler (2002) provides further insight into the contribution of tropes to enduring myths. "Tropes may be essential to understanding if we interpret this as a process of rendering the unfamiliar more familiar." Chandler further observes, "Our repeated exposure to, and use of, such figures of speech subtly sustains our tacit agreement with the shared assumptions of our society" (pp. 124-125).

6.2.4. The Myth-Developing Characteristics of Agenda-building

The idea of agenda-building, or how issues are selected for political consideration within a society, is of interest to the study of myth development. Cobb and Elder observe, "older items tend to dominate institutional agenda that are necessarily limited by time and the attention capacity of decision makers. The net effect is that it very difficult to get 'new issues' on the agenda" (1971, p. 907). This preference for existing agenda items may explain, in part, the longevity of energy independence in political discourses.

Wirth et al cite Weaver, McCombs, and Shaw in identifying "influential news sources, such as the president or political elites" as major media agenda influencers (2010, p. 328). Cobb and Elder observe "certain personages in the media can act as opinion leaders in bringing publicity to a particular issue" (1971, p. 909). Protess et al describe "Mutual self-interested ad hoc alliances" between media contributors and policy makers as a frequently observed characteristic of agenda building" (p. 250). These observations identify two key attributes of agenda-building and its myth-building properties: (1) media reporting by influential media contributors (2) citing cites influential news sources.

6.2.4.1 The agenda-building and myth-development relationship: a case study

The data set of 400 articles includes seven articles attributed to *New York Times* columnist Thomas Friedman, accounting for more bylines than any other writer in the data set. A 2011 *New York Times* article reports that President Obama "sounded out" Friedman and other prominent journalists for their expertise on Arab affairs and "regarding their visits to the region" (Landler, p. A12). Friedman meets both agenda-building criteria of influential media contributor citing influential media influencers including Presidents George W. Bush and Obama. The volume of Friedman's articles in

the data set provides an opportunity to examine the relationship between agenda-building and myth development in elite political media reporting. This case study section examines the seven Friedman articles as an illustration of agenda-building and its influence on myth construction.

In a 2002 article, Friedman describes the American character as "naively optimistic," a trait that inhibits the nation's ability to perceive and imagine evil of terrorism (p. 15). Describing an entire population or culture through such reductive terms is consistent with key functions and features of myths as described in this study's synthesis definition detailed in section 6.2.1: "Myths attempt to explain, simplify, naturalize, divert, or justify complex social phenomena" and "include powerful emotional components such as nationalism and patriotism." In this same 2002 article, Friedman advocates for "reducing our energy gluttony," an idea that is consistent with one of the major myths identified in this study, *America as a self-delusional addict*, which is explored in section 6.3.2.

In 2004, Friedman continues his ongoing effort to keep the topic of energy independence on the public agenda by suggesting energy independence could result in resolution of a myriad of the most complex and elusive challenges facing the nation. Achieving energy independence would enable President Bush to "dry up revenue for terrorism; force Iran, Russia, Venezuela, and Saudi Arabia to take the path of reform; strengthen the dollar; improve his own standing in Europe, by doing something huge to reduce global warming" (p. 13). Such ambitious desired outcomes promote the *indomitable American spirit myth*, addressed in section 6.3.1, and satisfy the component of the synthesis myth definition favorably portray and reinforce the collective national ego.

A 2005 Friedman article reinforces energy independence as a political agenda item by directly engaging existing myths of past national successes and cites prominent and influential business leaders including Jeff Immelt, the C.E.O. of G.E who promotes "energy and environmental practices as a national core competency" (p. 25).

A 2006 Friedman article directly contributes to the *America as a self-delusional drug addict myth*, described in section 6.3.2. Friedman suggests "we are the oil addicts and they are the oil pushers" and "addicts never tell the truth to their pushers" (p. 31). The agenda-building characteristics of the article are equally direct in Friedman's suggestion to "build a virtual wall. End our oil addiction." (p. 31).

A 2007 Friedman article sarcastically considers the Iranian view of America's failed attempts and weak commitment to achieve energy independence. According to Friedman's fictitious memo from the Iranian Ministry of Intelligence to Iranian President Ahmadinejad, "America's Manhattan Project turns out to be largely confined to the production of corn ethanol in Iowa which is nothing more than a multibillion-dollar payoff to big Iowa farmers and agro-businesses" (p. 31). Friedman's proposed perspective, from the point of view of a declared enemy of the U.S., exposes the *indomitable American spirit* myth as flawed and potentially self-undermining.

A 2008 Friedman article references energy independence only briefly, but as part of a larger promotion of patriotism and civic idealism, consistent with the synthesis myth definition.

A 2010 Friedman article offers evidence of the "mutual self-interested ad hoc alliances between media contributors and policy makers" as described by Protess et al. Friedman

describes Senator Lindsey Graham's departure from his Republican party views on energy independences as "courageous" (p. 10).

Seven articles during the 2002-2010 period by the same author provide an insightful view into the influence of agenda-building on myths related to energy independences. Friedman, a prestigious and highly recognized contributor for an elite media source, consistently promotes energy independence as a political agenda item while contributing to the energy independence mythology discourses. Friedman's consistency of message and media clout act as powerful agenda-building and myth-building agents.

6.3 Myths Observed, Analyzed, And Interpreted

As previously noted, the study period begins with President Nixon's 1973 introduction of the phrase energy independence into public discussion and continues through 2010. The struggle to define energy independence is observed throughout the 37-year span of the data set. A 2007 *Wall Street Journal* article, for example, asks, "what does 'energy independence' mean?" and then states "thought needs to be given to what energy independence means." The article offers some possible definitions, ranging from "1930s style 'autarky' and total self sufficiency" to "energy security – resilience, robustness, reduced vulnerability" (Yergin, 2007, p. A9).

Applied discourse analysis of the 16-article subset reveals three myths related to energy independence including the *indomitable American spirit, America as a self-delusional addict*, and *oil-producing Arab countries as villains*. These myths are not mutually exclusive and are sometimes observed in combination within the same article.

6.3.1 Myth 1: The Indomitable American Spirit

The *indomitable American spirit* myth expresses the belief that Americans, individually or collectively, can achieve anything they set their minds to. The *indomitable American spirit*

myth is the most enduring in terms of frequency observed and date range. Widely attributed to Benjamin Franklin and reinforced throughout American history as an essential attribute of American nationalism, the belief that Americans can achieve anything they set their minds to suggests the will to succeed or determination is paramount; other factors, such as resources and capabilities, are subordinate to collective determination and perhaps even irrelevant to success.

Embedded within to the *indomitable American spirit* myth is the trope of *struggle*, often with an accompanying narrative supported by a hero/villain motif in which America or representative individuals serve in the hero or world leader role. The *indomitable American spirit* myth often includes the component of the American work ethic, which expresses the belief that dedication to work will be rewarded.

The word and idea of independence carry powerful positive associations in American culture, with roots in the Declaration of Independence, the document and speech act that mark the beginning of the nation. Appending the word "independence" to energy creates a phrase presumably intended to boost favorable perceptions and thus suppress challenges to the phrase, offering the implied logic that Americans achieved independence as a sovereign nation, therefore there is precedent and thus reason to believe they can achieve another form of independence.

6.3.1.1 Indomitable American spirit - 1970s.

A recurring persuasive device to support the *indomitable American spirit* is to reference complex and challenging national successes from the past. Within the 16-article subset used for the discourse analysis, three articles suggest that the success of NASA's Apollo program provides evidence for the U.S. to potentially achieve energy independence and related aspirations. For example, a 1979 *Christian Science Monitor* article argues "Surely it is inconceivable that a people which planted a car in every garage, which put a man on

the moon, which revolutionized communications, does not have the intellectual and spiritual resources to lift itself out of its current economic woes" (Independence 1979, p. 24).

The same 1979 *Christian Science Monitor* article observes "President Carter perhaps had such an independence in mind when he nudged the leaders of the major industrial democracies to set limits on their oil imports and to work together to combat recession and inflation and find alternative energy sources" (Independence 1979, p. 24). This anecdote positions Carter as a leader among leaders, delineates between democracies and non-democracies, and describes collective efforts as a combative alliance. The idea of leading and working together with other like-minded nations may be viewed as an extension of the *indomitable American spirit* myth.

6.3.1.2 Indomitable American spirit - 1980s.

A 1984 *New York Times* article quotes Lester B. Lave, Carnegie-Mellon University professor of economics and public policy, who directly accesses the *indomitable American spirit* myth with the observation "there is no single problem that you can't overcome" (Diamond, 1984, p. 35).

In a retrospective article examining progress toward energy independence during the 10-year span between the 1973 oil crisis and the 1983 publication date, The *Christian Science Monitor* quotes George Horwich, Purdue economist and energy preparedness author, "There's been a marvelous long-term kind of adjustment" (to conserve and become more energy efficient). The adjustment to which Horwich refers provides an example of America achieving what it sets its mind to, thus annexing the narrative into the *indomitable American spirit* myth (Grier, p. 22).

6.3.1.3 Indomitable American spirit - 1990s

A 1995 *Wall Street Journal* article introduces a potentially divisive word, welfare, into the energy independence discussion (Bovard, 1995, p. A18). Welfare can be perceived favorably as humane assistance or negatively as an unearned handout. Nisbet juxtaposes the idea of individualism, a belief in that "economic opportunity is the United States is widespread and that anyone who tries hard enough can succeed" with the idea of humanitarianism, the belief that "government has an obligation to assist those who are most in need" (Nisbet, 2010, p. 60). "References to "corporate welfare," "farm welfare," and "subsidy magnet" can be viewed relative to the American work ethic component of the *indomitable American spirit myth*, which presumes effort will result in, and is the preferred method, to achieve desirable outcomes. The unearned view of welfare and subsidies conflicts with the central tenet of the American work ethic.

The *indomitable American spirit* myth can also be observed in cases of missed opportunity. For example, a 1996 *New York Times* article compares prior progress toward reducing oil imports against a more recent trend reversal, "Americans in the early 1980s pursued a course of almost fanatical energy conservation." This observation suggests some degree of energy independence is possible if not for collective abandonment of the effort. "Short memory spans, lack of collective will, and widespread prioritization of convenience doomed progress toward energy independence" (Salpukas, p. 1). In this exhibition of *the future that could have been* trope, the nation has missed an opportunity to set its mind to a substantial achievement. The failure, attributed to lack of will, serves to reinforce the component of the myth that suggests Americans can do anything they set their mind to.

A central quotation in a 20-year retrospective *Washington Post* article published in 1993 is an excerpt from President Nixon's November 1973 Project Independence speech, which introduced the phrase energy independence into political and social discussion. In a direct appeal to the national pride component of the *indomitable American spirit* myth, Nixon specifically defines energy independence as zero imports: "Let us set as our national goal, in the spirit of Apollo, with the determination of the Manhattan project, that by the end of this decade we will have developed the potential to meet our own energy needs without depending on any foreign energy source." The quotation includes three shared cultural references that provide access to the *indomitable American spirit* myth including a direct reference to NASA's Apollo space program, the second example of comparisons to the Apollo program within this 16-article discourse analysis; the research program that led to the development of the first atomic bomb; and the timeline "by the end of this decade," directly borrowed from President Kennedy's Man on the Moon address of September 12, 1962 (Lippman, p. A12).

6.3.1.4 Indomitable American spirit - 2000s

A 2005 *Christian Science Monitor* article quotes Armory Lovins, chairman of Rocky Mountain Institute and an active voice in the energy independence public discussion: "The nation has within its grasp the technology to change the picture entirely – if it can find the will." This observation directly accesses the *indomitable American spirit* myth. It even provides an example, a component that is sometimes absent from the myth narratives, "The last time we exercised that power in the late 1970s, and it broke OPEC's market power for more than a decade" (Clayton, p. 1).

As seen in other texts within the 16-article subset, a 2005 *New York Times* compares the quest for energy independence to the Apollo program and Manhattan project, suggesting the nations should make "a quest for energy independence the moon shot of our generation" (Friedman, p. 25). The shared cultural reference of a "moon shot" is a metaphor for substantial, sustained, unprecedented effort to overcome overwhelming challenges, achieve a highly unlikely outcome, and change the course of history. This same 2005 *New York Times* article appeals to national pride by suggesting "America's kids are hungry to be challenged" through studying science, math and engineering to further "the great national purpose." In two instances, the writer explicitly asks the reader to imagine a new gasoline tax and stronger regulation that would lead to innovation and "making us the greenest nation on the planet." The proposed name, "American Renewal Tax" is consistent in name with the *indomitable American spirit* myth, suggesting America can rebuild "all of our cities and strengthening the nation as a whole" if Americans set their minds (and education focus and tax dollars) to it. The appeal to national pride shifts to a nationalistic fear appeal with the warning that American industry "will be dinosaurs and that Chinese, Japanese, and Indian companies will take the lead in green technologies" if the nation loses its collective will (Friedman, p. 25).

6.3.2 Myth 2: America as a Self-delusional Addict

In contrast to the *indomitable American spirit* myth, the *America as a self-delusional addict* myth expresses the belief that undesirable American behaviors have resulted in destructive addictions. Addiction to imported sources of energy, most notably oil, is the addiction of interest to this study. The aspiration for energy independence presumes an existing

condition of dependency or addiction. If addiction is viewed as a failure of will, then the *America as a self-delusional addict* myth may be the complementary opposite of the *indomitable American spirit* myth. The coexistence of the *America as a self-delusional addict* myth and the *indomitable American spirit* myth suggests a duality of the American character and self-identity, capable of great strength and debilitating self-destructive behaviors. It's also striking, however, that both myths are invested in ideas of individual will that are then projected onto the whole collective.

A 1983 *Christian Science Monitor* article refers to OPEC as a cartel (Grier, p. 22). In its formal definition, the application of the word cartel describes collusion in defiance of anti-trust laws and practices. In news reporting, the word cartel is often used to describe criminal organizations developed with the primary purpose of promoting and controlling drug trafficking operations. This association of petroleum suppliers with illegal drug organizations is consistent with other articles including the 1996 *New York Times* Article "Suburbia Can't Kick the Nozzle; As Gas Guzzling Becomes a Way of Life, Oil Imports Soar," which this analysis examines in section 6.3.2.2 *America as a self-delusional addict - 1990s* (Salpukas, p. 1).

6.3.2.1 America as a self-delusional addict - 1980s

Phillips and Jorgensen, Brown and Yule, and Gee separately suggest the substitution as a method to consider alternative choices. "Substitution involves substituting a word with a different word, resulting in two versions of the text which can be compared with one another; in this way, the meaning of the original world can be pinned down" (Phillips and Jorgensen, 2004, p.150). Through substitution, the researcher replaces a particular word in a text to determine how the original word influences meaning, identity and attitudes. Alternative choices are identified by enclosure in parentheses with a textual prompt and

italics indicator suggesting the reader substitute an alternative word or phrase choice, for example: energy independence (substitute *energy addiction*).

A 1983 *Christian Science Monitor* article describes aggregate consumption in terms that mimic the lexicon of addiction, as demonstrated through substitute words enclosed in parentheses. Examples such as "slurping up (substitute *shooting up*) 18.3 million barrels of oil a day" as the U.S. attempts to tame its "voracious appetite (substitute *addiction*) for petroleum," and "struggling with its addiction of gas guzzling (substitute *alcohol guzzling*)" all parallel the language of substance abuse (Grier, p. 22).

This same 1983 *Christian Science Monitor* article observes, "America may have cut its thirst (substitute *lust*) for oil." Thirst may be viewed as a form of addiction or gluttonous excess. The thirst metaphor reoccurs in the article in the description of station wagons "as large and thirsty as aircraft carriers" (Grier, p. 22).

A 1987 *Wall Street Journal* article includes the words "dependence" and "shooting up" in the headline: "U.S. Dependence on Oil Imports Is Shooting Up" (Taylor, 1987, p. 1). Though "shooting up" in this case may primarily refer to a rapid increase in the volume of oil imports, the duality of the word choice is evident if we consider the common parlance usage to describe drug abuse in the form of self-injection of narcotics such as heroin.

6.3.2.2 America as a self-delusional addict - 1990s

A 1995 *Wall Street Journal* article compares fuel ethanol to alcoholism. The word dependence is used as part of the argument against mandated support of ethanol, warning against "needlessly increasing corn farmers' dependence (substitute *addiction*) on government," perhaps suggesting the quest for energy independence comes at the

expense of another form of dependency. The article continues with even more direct comparison of fuel ethanol to alcoholism, "Subsidizing ethanol to benefit corn farmers makes as little sense as a mandate forcing Americans to drink more grain alcohol. Washington should finally sober up and stop worshipping ethanol" (Bovard, p. 18).

A 1996 *New York Times* article attributes the failure to achieve energy independence to addiction. The headline directly borrows from the language of addiction, as demonstrated by insertion of substitute words in parentheses: "Suburbia Can't Kick the Nozzle (substitute *Needle*); As Gas (substitute *Alcohol*) Guzzling Becomes a Way of Life, Oil Imports Soar." Experts quoted within the article may serve in the narrative role of surrogate drug dealers who attempt to assuage collective concerns about addiction. For example, the words of a petroleum industry spokesperson "we don't need to fear dependence on (oil) imports," attempt to diminish concerns. "Way of Life" in the headline may be viewed as an addict's full acceptance and perceived irreversibility of the addiction in the context and wake of failed treatment programs. In this context, the substance abuser may view efforts to get clean as an exercise in futility because the anticipation of the next drug hit precludes determination or will to recover. As an example of another surrogate drug dealer, a car dealer adds, "the current situation is certainly not a cause for alarm," in a further attempt to minimize the perceived effect of substance dependency. The article observes, "The country has reverted to its old ways," suggesting, in the language of addition, the country has fallen off the wagon (Salpukas, 1996, p 1).

6.3.3 Myth 3: Oil–producing Arab Nations as Villains

Myths often employ a hero/villain motif, such as a 1979 *Christian Science Monitor* article, which attempts to add credibility and rhetorical force by referring to highly respected historical figures and sources of national pride such as Thomas Jefferson and John Adams. Jefferson and Adams serve in hero roles in the narrative through their contributions to creating "an extraordinary system of constitutional government" and their leadership against "the tyranny of a King George," who serves in the villain role in this narrative (Independence 1979, p. 24).

The study observed multiple examples of oil-producing Arab nations cast in the villain role in opposition to the quest for American energy independence. Suleiman's findings confirm such stereotypes in media coverage: "Arabs are almost always associated only with the negative aspects of oil, i.e. oil boycotts, price increases (often referred to as "gougings," "robber," etc.), and the price-fixing "oil cartel" (Suleiman, 1982, p. 147). Said observes that media coverage often conflates Arab and Muslim identities with "caricatures of Muslims as oil suppliers, as terrorists, and more recently, as bloodthirsty mobs" (Said, 1997, p. 6). The persistent stereotype of the villainous Arabs is observed throughout the study period and beyond.

It is interesting to consider the observed stereotype of Arabs as villains in tandem with the American brand of nationalism. For example, former New York Mayor Giuliani captured multiple elements of American self-identity in his farewell address, delivered just 107 days after the September 11, 2001 acts of terrorism during a period of heightened anti-Arab sentiments.

"All that matters is that you embrace America and understand its ideals and what it's all about. Abraham Lincoln used to say that the test of your Americanism was not your family tree; the test of your Americanism was how much you believed in America. Because we're like a religion really. A secular religion. We believe in ideas and ideals. We're not one race, we're

many; we're not one ethnic group, we're everyone; we're not one language, we're all of these people" (Text of Mayor Giuliani's Farewell Address, 2001).

6.3.3.1 Oil–producing Arab nations as villains - 1970s

A 1973 *Washington Post* article offers a provocative headline *Oil blackmail threatens U.S. independence*, in reference to the oil–producing Arab nations that participated in an oil embargo that disrupted global oil supply. The word blackmail is a bold, non-neutral word choice, often used in criminal contexts and likely used with the intention of prompting an emotional response. Arab stereotypes are also observed in the context of market manipulation, "The Arab states have to be prevented from destroying this novel competition overnight by arbitrarily cutting their own oil prices for a while." With questionable logic, the article suggests preserving the free competitive markets through active market manipulation in the form of protectionism. It is an early example of the recurring portrayal of oil–producing Arab nations as villainous (Alsop, p. A19).

6.3.3.2 Oil–producing Arab nations as villains - 1980s

A 1983 *Christian Science Monitor* retrospective article unfavorably recollects OPEC "flexed its muscles" in retaliation as "Arab members of the (OPEC) cartel announced an oil embargo against the United States" (Grier, p. 22).

6.3.2.3 Oil–producing Arab nations as villains - 1990s

A 1993 *Washington Post* article describes the "starved" U.S. economy as held "in the grip" and "hostage to a small group of oil ministers unknown to most Americans" (Lippman, p. A12). The graphic lexical choices assign the narrative villain role to the hostage-holding oil ministers, implicitly understood to refer to officials of oil–producing Arab nations. True to the *indomitable American spirit* myth structure resolution, the U.S.

in the narrative hero role achieves redemption in the form of increased national energy conservation and environmental consciousness, immediately followed with a warning against complacency and loss of collective will, which serves to reinforce the American work ethic component of the *indomitable American spirit* myth.

6.3.3.4 Oil–producing Arab nations as villains - 2000s

In a 2005 *Christian Science Monitor* article, former assistant secretary of defense Frank Gaffney Jr. observes, "Sending tens of billions of dollars overseas to people determined to destroy us is crazy" (Clayton, p. 1). The publication date during the second year of the eight-year war in Iraq perhaps accounts for the elevated level of inflammatory language directed at oil-producing Arab nations.

6.4 Myth Aggregations

The observed myths related to energy independence are sometimes found within the same article, forming more complex myth aggregations or myth systems. A key function of these aggregations is to mutually reinforce. Aggregations also create underlying if/then logic, for example, *if* Americans can do anything they set their minds to, *then* America can achieve energy independence through collective dedication, as evidenced by past successes such as the Apollo program and the Manhattan project. This example combines two separate myths into a single statement that is more powerful through example than either of the component myths considered separately. As the dominant myth in the aggregation, the *indomitable American spirit* suggests energy independence is possible but not guaranteed through the collective determination. Past major national successes, such as the Apollo program and Manhattan Projects, are offered as evidence of this force of will to overcome barriers, addictive tendencies, and attempts by oil-producing Arab counties to undermine the objective of energy independence.

6.5 Myth Analysis Conclusions

The myth analysis identified three myths related to energy independence: the *indomitable American Spirit*, *America as a self-delusional addict*, *oil-producing Arab nations as villains*.

The most enduring observed myth, the *indomitable American spirit*, suggests that Americans can achieve anything they set their minds to through collective determination. Past national successes, such as the Apollo space program are offered as evidence to support the indomitable American spirit myth.

The *America as a self-delusional addict* myth suggests destructive behaviors have led to a condition of dependency or addiction to imported source of energy. This failure of will may be viewed as the complementary opposite of the *indomitable American Spirit* myth. The lexicon of substance abuse is applied in energy independence discussions in multiple observed data sources.

The *oil-producing Arab nations as villains* myth assigns blame for the condition of energy dependence to energy exporting nations, particularly Arabic nations. Lexical choices such as “blackmail” and “threat” underscore contentious relations with OPEC, particularly during the 1970s.

Myths are not mutually exclusive; multiple myths are sometimes observed within the same article, forming myth aggregations that mutually reinforce.

Chapter 7: Findings, Conclusions, and Future Related Research

7.1 The Allure and Enduring Communicative Power of the Energy Independence

Perhaps an appropriate way to begin a discussion of study findings and future research is to identify what remains ambiguous. Energy independence advocates continually and competitively attempt to engage the collective will of the nation to achieve a goal that is neither clearly defined nor has been demonstrated as possible. As a 2007 *Wall Street Journal* article suggests, "The concept of energy independence is compelling and deeply appealing" but suggests the continued calls for energy independences may be "rhetorical overreach that will lead, as in the past, to disappointment and cynicism, the kind that drives cycles of inconsistency in energy policy and leaves the U.S. no less vulnerable" (Yergin, p. A9). The political and popular allure of energy independence, along with the lack of consensus in defining energy independence, contribute to its staying power, enabling diverse political and industrial voices to adapt and shape the idea of energy independence to their own persuasive appeals for nearly 40 years. The cumulative effect may to inhibit and compromise policy, legislation, and cultural practices that could lead to authentic reduction in energy dependence.

The phrase's communicative persistence and ambiguity enable the development of a powerful and enduring myth system. This study has observed continuity of certain myths related to energy independence, suggesting the myths observed are deeply embedded and naturalized within American culture and thus reinforce the values of the culture.

7.2 Synthesis Conclusions Formed Through Rhetorical Interrogative Series

The four analysis chapters of this dissertation examine energy independence discourses from specific perspectives: frames, communicative functions, comment sources, and myths. This section aims to synthesize these analyses through a series of questions – the interrogative Ws -

developed by rhetoricians. This approach does not attempt to capture all preceding observations; the intent is to select and organize the most prominent, relevant, and substantiated observations.

7.2.1 Who Is Talking About Energy Independence?

Consistent frequency of the politician, industry, and advocacy group comment sources are observed across the study period. Politician is the leading comment source across the full study period and within all decades except the 1990s. Consistent frequency suggests politicians view energy independence as a necessary discussion topic regardless of time period.

The Political Campaign communicative function is observed in surprisingly low frequency and in possible conflict with comparatively higher observed frequency of the Politician comment source. A possible explanation is politicians are frequent users of the phrase "energy independence," but the data suggest they don't necessarily frequently use the phrase as part of their campaigns for office.

7.2.1.1 Observed hegemony among comment sources

Politician is the most frequently observed comment source in all decades except the 1990s, when it is the second most frequently observed comment source. Politician is also the most frequently observed comment source across the entire study period. By these observed frequencies, the Politician comment source exhibits a degree of dominance.

It is informing to consider the combined presence of the Politician and Government Agency comment sources as a single combined comment source labeled as Government-Related and highlighted in Table 7.2.1.1 in grayscale. The frequencies of the combined Government-Related comment sources exhibit a sharply expanded degree of hegemony in all decades and the overall study period, with differentials ranging from 23 to 33

percentage points compared to the comment source with the next highest observed frequency in each decade.

A note regarding the methodology of combining comment source 1 and comment source 2 is needed here. Simple addition of observed presence of each comment source could result in a numerator that is greater than the denominator, or the illusion of more observations of presence than possibilities of presence. For example, simple addition of observed presence in 1990s for comment source 1 (15 of 28) and comment source 2 (23 of 28) would result in an impossible combined category total (38 of 28). To correct for double counting of articles in which comment source 1 and comment source 2 are both observed as present in the same article, articles meeting these criteria are counted once in the combined category.

Table 7.2.1.1 Observed Hegemony Among Comment Sources

Decade	Comment Sources 1 & 2 Combined: Government-Related	Comment Source 3: Industry	Comment Source 4: Advocacy Group	Comment Source 5: Academic
1970s	71% (41of 58)	38% (22 of 58)	5% (3 of 58)	17% (10 of 58)
1980s	73% (49 of 67)	42% (28 of 67)	25% (17 of 67)	28% (19 of 67)
1990s	66% (22 of 28)	43% (12 of 28)	39% (11 of 28)	32% (9 of 28)
2000s	66% (162 of 247)	40% (100 of 247)	28% (69 of 247)	22% (54 of 247)
Total/Average	68.5% (274 of 400)	41% (162 of 400)	25% (100 of 400)	23% (92 of 400)

7.2.2 What Are They Saying About Energy Independence?

Advocacy groups express, with thematic consistency, the idea that not enough is being done or the wrong actions are being taken. Advocacy within the environmental frame increased dramatically over time, attributable in part to the post 1970s decline in prominence of coal as an energy independence solution.

Politicians frequently rely upon metaphorical language to express a range of persuasive appeals. Observed examples include the *promise of a bright future* metaphor and *future that could have been* metaphor.

Industry sources have cleverly identified a method of bypassing the evidence requirement for persuasive appeals through the *technology as a black box metaphor*, in which input and output can be observed but internal mechanisms that convert input to output are unavailable for inspection or understanding except by an elite group of experts.

7.2.3 When Are The Key Turning Points In The Energy Independence Discourses?

The most frequently observed frame during the 1970s and 1980s is economic considerations, one of several frames that aim to assert the necessity of energy independence. During the 1990s and 2000s, the specific solutions frame – which presumes necessity - emerges as the most frequently observed frame. Establishment of necessity followed by presumption of necessity adheres to a logical frame progression.

7.2.4 Why do politicians, representatives of industry, advocacy groups, among others, participate in energy independence discourses?

The most inclusive answer to the *why* question is to reinforce American values such as freedoms and free markets, to protect and promote public interests such as national security and

private interests such as favorable economic and regulatory conditions, and to promote proposals for energy independence solutions.

7.2.3.1 Discursive participation to reinforce American values

The notion of free markets occupies a prominent position and preferred status in American society. The influence of free markets is observed throughout the data; the widely understood and accepted premises of free markets provide a framework for arguments in support of or, more frequently, in opposition to energy independence proposals.

7.2.3.2 Discursive participation to protect American interests

If independence is the preferred condition, then discussion of energy dependence begins with the premise that relationships with oil producing countries are typically not optimal. The observed use of contentious lexical choices, a distinguishing characteristic of the international relations frame, supports the premise. Descriptions such as “oil blackmail” and “take advantage of us” endow imported energy (and, by extension, energy producing nations) with a sinister quality rather than a neutral quality typically associated with commodities.

The national security frame is observed with remarkably stable frequency across all decades. Such stability suggests continual concern for national security but is not perceived as the most important societal concern. It is interesting to note that the national security frame in inherently negative in that it addresses risk and fear of loss of the preferred condition rather than aspiration for an unrealized improved condition.

7.2.3.2 Discursive participation to consider solutions

The specific solutions communicative function is the most prominent of all observed communicative functions for most of the study period, suggesting a preference for discussion of tangible results. There may be a linkage with the government action communicative function, which considers proposals for government intervention that may lead to specific solutions. The government actions communicative function is in conflict with the minimal intervention ideal of free markets yet is consistently among the top observed frequencies. American preferences are divided between achievement through focused collective effort and achievement through the vast resources of the U.S. government.

7.2.4 In What Way Do Participants Engage in Energy Independence Discourses?

Existing American myths serve as both an entry point and a sustaining structure for energy independence discourses. Metaphors also serve as effective message delivery systems.

The most enduring observed myth, the *indomitable American spirit*, suggests that Americans can achieve anything they set their minds to through collective determination. Past national successes, such as the Apollo space program are offered as evidence to support the indomitable American spirit myth.

The *America as a self-delusional addict* myth suggests destructive behaviors have led to a condition of dependency or addiction to imported source of energy. This failure of will may be viewed as the complementary opposite of the *indomitable American Spirit* myth. The lexicon of substance abuse is applied in energy independence discussions in multiple observed data sources.

The *oil-producing Arab nations as villains* myth assigns blame for the condition of energy dependence to energy exporting nations, particularly Arabic nations. Lexical choices such

as “blackmail” and “threat” underscore contentious relations with OPEC, particularly during the 1970s.

7.3 Ethical Considerations Related to Energy Independence

The persistence of energy independence discourses give rise to ethical complications. The underling belief of the *indomitable American spirit* myth is that Americans, individually or collectively, can achieve anything they set their minds to. This belief may offer an implied moral justification that Americans should do what they are capable of doing. From this myth-based justification, ethical issues could arise, such as waging unprovoked wars upon energy-rich nations for the purpose of controlling supply streams, or drilling for oil on public land, or passage of legislation that allows for pollution of public supplies of groundwater as a side effect of energy production.

The communicative power of energy independence in some cases supersedes the value assigned to human life. A 1996 *New York Times* article recalls, “a bombing of a housing complex for American, British, and French troops in Saudi Arabia last month brought home the vulnerability of the United States’ foreign supplies” (Salpukas, p. 1). It is interesting to note this example does not detail injuries or loss of life resulting from the bombing, but does express concerns regarding the effect of supply interruption.

7.4 Related Future Studies

The study yielded promising opportunities for further research on a range of related topics.

7.4.1 The influence of nationalism, ethnic hostility, and emotional response

This study has revealed a persistent myth of *oil–producing Arab nations as villains*. An interesting related study could consider the role that American nationalism plays in the

development and continuation of anti-Arab attitudes and the role that expressed ethnic hatred plays in international relations. A salient research question may address correlation and possible causal relationships of energy discourses and Arab stereotypes, focusing on changes observed prior to and during the Persian Gulf wars.

This study examined emotional response as a communicative function of the phrase energy independence. Related future research may comparatively examine the specific range of emotional responses to the phrase among the media-consuming public, such as pride, motivation, remorse over missed opportunities, optimism, nationalism, and ethnic hostility.

7.4.2 Re-entry of nuclear energy discourses

Academic literature and mainstream media of in several of the later years of the study period address nuclear energy as a contributor toward energy independence, in stark contrast to the near absence of discussion of nuclear energy in academic studies and public data during the 1980s and 1990s, following the 1979 partial nuclear meltdown at the Three Mile Island power plant in Pennsylvania. Efforts in the 2000s aim to rehabilitate the image of nuclear energy, advocate it as a powerful source of energy independence, and position it as environmentally favorable to fossil fuels.

A related future study may include the re-entry of nuclear energy discourses into academic, political, and public data as a means toward energy independence before, during, and after disasters at Three Mile Island in 1979, Chernobyl Ukraine in 1986, and Sendai Japan in 2011.

7.4.3 Emerging discourses: energy interdependence and homeland security

New terms that emerged in the later years of the study may be of interest for future studies, including *energy interdependence* and *homeland security*. Energy interdependence may partially replace usage of the phrase energy independence over time. If such a pattern can be observed, it may signal a shift in attitudes from a preference for isolationism and self-sufficiency toward a preference for international cooperation. The term homeland security came into common usage as an outcome of the Homeland Security Act of 2002 and the federal department bearing the same name. Compared to perceptions of the term national security, homeland security may be viewed more personal, imminent and universal compared to perceptions of national security. If this is the case, the persuasive value of homeland security may be superior to national security. The idea of energy independence may become absorbed into a fear-inspired brand of nationalism that demonstrates a willingness or even preference for protection and preservation of energy supplies at any cost, including compromising of traditional domestic liberties and a readiness to engage in military solutions to international conflicts regarding energy.

7.4.4 The role of slogans in myth development

Perhaps a 2010 *Washington Post* article best captures the duality of energy independence's enduring communicative value and its ultimate failure to deliver on its transformative promise. "The energy independence thing hasn't exactly worked out." Energy independence, the article suggests, "sounded great, would fit on a bumper sticker, made for a terrific slogan," suggesting the phrase, though persuasive, is shallow and does not necessarily offer a viable execution plan (Sloan, p. A10). Sloan's classification of

energy independence as a slogan endows it with the qualities of a communicative commodity: exchangeable, interchangeable, and adaptable.

The classification of energy independence as a slogan may lead to a related future study. According to Levinson, sloganeering is “a form of group-think” that functions to “ease the burden of individual responsibility for thinking things through” (2006, p. 67-76). The communal characteristics of slogans are consistent with the shared cultural understandings and values components of this study’s working operational definition of myth and thus may in some instances play a contributory role in myth development and persistence.

List of References

Allen, Graham. (2003). Roland Barthes, *Routeledge*.

Alsop, J. (1973, Nov 21). Oil blackmail threatens U.S. independence. *The Washington Post,* P. A19.

Barthes, Roland. (1957, 1972). Mythologies. *Hill and Wang*.

Bisk, T. (2007). The energy project: independence by 2020. *The Futurist*, 41(1), 25. Retrieved from http://search.proquest.com/docview/218606171?accountid=10559.

Bovard, James. (1995, November 2). Dole, Gingrich and the big ethanol boondoggle. *Wall Street Journal*, p. 18.

Brewer, Paul R. and Kimberly Gross. (2010). Studying the effects of framing on public opinion about policy issues, in *Doing news framing analysis: empirical and theoretical perspectives*, ed. Paul D'Angelo & Jim A. Kuypers, pp. 150-186. *Routledge*.

Brooks, David. (2011). The social animal, *Random House*.

Brown, Gillian and George Yule. (1983). Discourse Analysis, *Cambridge University Press*.

Bruner, Jerome. (2004). Life as narrative*, Social Research,* Volume 71 Issue 3 Pages 691-710.

Chandler, Daniel. (2002). Semiotics: the basics, *Routledge,* p. 124-125.

Clayton, Mark. (2005, May 5). Rising call: Cut US oil imports. *Christian Science Monitor*, p. 01.

Cobb, Roger W. and Charles D. Elder. (1971, November). The politics of agenda building: an alternative perspective for modern democratic theory. *The Journal of Politics,* Vol. 33, No. 4.

Cobb, Roger W., Jennie-Keith Ross and Mark Howard Ross. (1976, March). Agenda building as a comparative political process. *The American Political Science Review*, Vol. 70. No. 1.

Condit, Celeste Michelle. (1999). In John Louis Lucaites, Celeste Michelle Condit and Zally Caudill, Contemporary Rhetorical Theory. *Guilford*, p. 526.

Cooper, Stephen D. (2010). The Oppositional Framing of Bloggers, in Paul D'Angelo and Jim A. Kuypers, Doing News Framing Analysis. *Routledge*, p. 141.

Cowan, Edward. (1975, Feb 06). Energy independence. *New York Times,* p. 22.

U.S. Department of Energy, (2013). Energy Timeline from 1971 to 1980. http://web.archive.org/web/20110721035950/http://www.energy.gov/about/timeline1971-1980.htm.

Deutch, P. J. (2005). Energy independence. *Foreign Policy*, (151), 20. Retrieved from http://search.proquest.com/docview/224043231?accountid=10559.

Diamond, Stuart. (1984, July 14). King coal's bid for comeback. *The New York Times*, p. 35.

Dole Archive. (1990). Dole clean air, budget proposals give twin boost to ethanol. Retrieved from http://dolearchive.ku.edu/collections/archives/_files/901029eth.pdf.

Dryzek, John S. (2013). The politics of the earth. *Oxford University Press*.

Entman, R. M. (2007). Framing bias: media in the distribution of power. *Journal of Communication*, 57(1), 163-173. doi:10.1111/j.1460-2466.2006.00336.x.

Entman, Robert M. (2004). Projections of power: framing news, public opinion, and U.S. foreign policy, *University of Chicago Press*.

Eisenstein, Paul A. (1991, February 12). New fuel-economy bill draws fire from carmakers. *Christian Science Monitor*, p. 6.

Fairclough, Norman A. (2003). Analyzing discourse: textual analysis for social research, *Routledge*.

Fairclough, Norman. (2010). Critical Discourse Analysis: the critical study of language, *Pearson Education Limited*.

Faisal, T. A. (2009). Don't be crude. Foreign Policy, (174), 102. Retrieved from http://search.proquest.com/docview/224035183?accountid=10559.

Fish, Stanley. (1980). Is there a text in this class? *Harvard University Press*.

Fisher, Max. (2013, September 12). Vladimir Putin's New York Times op-ed, annotated and fact-checked. *The Washington Post.* Retrieved from http://www.washingtonpost.com/blogs/worldviews/wp/2013/09/12/vladimir-putins-new-york-times-op-ed-annotated-and-fact-checked/.

Friedman, Thomas L. (2002, May 19). A failure to imagine. *The New York Times*, p. 15.

Friedman, Thomas. L. (2004, December 5). Fly me to the moon. *The New York Times*, p. 13.

Friedman, Thomas. L. (2005, September 21). Bush's waterlogged halo. *The New York Times*, p. 25.

Friedman, Thomas. L. (2006, December 1). The energy wall. *The New York Times*, p. 31.

Friedman, Thomas. L. (2007, December 5). Intercepting Iran's take on America. *The New York Times,* p. 31.

Friedman, Thomas. L. (2008, November 5). Finishing our work. *The New York Times*, p. 35.

Friedman, Thomas. L. (2010, February 28). How the G.O.P. goes green. *The New York Times*, p. 10.

Gee, James Paul. (2001). How to do discourse analysis: a toolkit. *Routledge.*

Grier, Peter. (1983, October 18). The oil crisis: 10 years after; America may have cut its thirst for oil, but energy independence is still a long way off. *Christian Science Monitor,* p. 22.

Harvey, David. (2003). The fetish of technology: causes and consequences. Macalester International: Vol. 13, Article 7. Available at: http://digitalcommons.macalester.edu/macintl/vol13/iss1/7

Heiman, M. K., and Solomon, B. D. (2007). Fueling U.S. transportation: The hydrogen economy and its alternatives. *Environment*, 49(8), 10. Retrieved from http://search.proquest.com/docview/224014244?accountid=10559.

Hertog, James K. and Douglass M. McLeod. (2001). A multiperspectival approach to framing analysis: a field guide, in Stephen D. Reese, Oscar H. Gandy, Jr., August E. Grant, Framing Public Life, *Routledge.*

Independence 1979. (1979, July 02). *Christian Science Monitor*, p. 24.

Jasinski, James. (2001). Sourcebook on rhetoric: key concepts in contemporary rhetorical studies, *SAGE Publications, Ltd*.

Kinder, D. R. (2007). Curmudgeonly advice. *Journal of Communication*, 57(1), 155-162.

Lakoff, George. (2008). The political mind. *Penguin Group*, pp. 11-12.

Lakoff, George and Mark Johnson. (1980). Metaphors we live by. The University of Chicago Press.

Lander, Mark. (2011, May 12). Obama Seeks Reset in Arab World. *The New York Times*, p. A12.

Levinson, Martin H. (2006, January) Crazy talk, stupid talk – redux, *et Cetera* p. 67-76)

Lippman, Thomas W. (1993, November 26). Memories of gas lines dimmed by time and tide of oil; 1973 Arab embargo on imports starved U.S. hunger for mobility, fed inflation, and energized conservation. *The Washington Post,* p. A12.

Marlantes, Liz (2003, June 19). Democrats try energy issue to trump Bush. *Christian Science Monitor,* p. 2.

McCombs, Maxwell. (2004). Setting the agenda, *Blackwell Publishing*.

McGee, Michael Calvin. (1999) In search of "the people": a rhetorical alternative, in John Louis Lucaites, Celeste Michelle Condit and Zally Caudill, Contemporary Rhetorical Theory. *Guilford*, p.347.

McMahon, Tim. (2013, April 16.) Historical crude oil prices: oil prices 1946-Present. Retrieved from http://inflationdata.com/Inflation/Inflation_Rate/Historical_Oil_Prices_Table.asp

Miller Center of Public Affairs, University of Virginia. *Presidential Speech Archive*, http://millercenter.org/scripps/archive/speeches.

Morse, E. L. (2009). Low and behold: Making the most of cheap oil. *Foreign Affairs*, 88(5), 36. Retrieved from http://search.proquest.com/docview/214284526?accountid=10559.

Natufe, O. Igho. (2013, July 1). Cold War In The Post Soviet Era – Analysis. Eurasia Review. Retrieved from http://www.eurasiareview.com/01072013-cold-war-in-the-post-soviet-era-analysis/.

Nemet, Gregory F. and Daniel M. Kammen. (2007). US energy R&D: declining investment, increasing need, and the feasibility of expansion, *Energy Policy* 35 746-755.

Nisbet, Matthew C. (2010) Knowledge in action; framing the debates over climate change and poverty, in , in Paul D'Angelo and Jim A. Kuypers, Doing News Framing Analysis. *Routledge*, p.60.

Pan, Ahongdang and Gerald M. Kosicki. (2001), Framing as a strategic action in public deliberation, in *Framing public life*, ed. Stephen De. Reese, Oscare H. Gandy, Jr. and Auguste E. Grant, *Lawrence Erlbaum Associates, Publishers*.

Phillips, Louise and Marianne W. Jorgensen. (2004). Discourse analysis as theory and method. *Sage Publications*.

Protess, David L., Fay Lomax Cook, Jack C. Doppelt, James S. Ettema, Margaret T. Gordon, Donna R. Leff, and Peter Miller. (1991). The journalism of outrage; investigative reporting and agenda building in America. *The Guilford Press*.

Reese, Stephen D. (2001). The framing project: a bridging model for media research, in *Framing public life*, ed. Stephen De. Reese, Oscare H. Gandy, Jr. and Auguste E. Grant, *Lawrence Erlbaum Associates, Publishers*.

Resources for the Future, (2013). http://www.rff.org/Pages/default.aspx.

Said, Edward. (1981, 1997). Covering Islam: how the media and the experts determine how we see the rest of the world. *Vintage Books*.

Salpukas, A. (1996, July 23). Suburbia can't kick the nozzle; as gas guzzling becomes a way of life, oil imports soar. *The New York Times*, p. 1.

Schaffer, M. B. (2007). Nuclear power for clean, safe and secure energy independence. Foresight : The Journal of Futures Studies, Strategic Thinking and Policy, 9(6), 47. Retrieved from http://search.proquest.com/docview/224160870?accountid=10559.

Scheufele, D. A., and Tewksbury, D. (2007). Framing, agenda setting, and priming: The evolution of three media effects models. *Journal of Communication*, 57(1), 9-20. doi:10.1111/j.1460-2466.2006.00326.x.

Shapiro, Margaret. (1984, August 3). House slashes funding for synfuels programs. *The Washington Post,* p. A2.

Sloan, Allan. (2010, July 13). Magical thinking is not an energy strategy. *The Washington Post*, p. A10.

Solomon, B. D., Barnes, J. R., and Halvorsen, K. E. (2007). Grain and cellulosic ethanol: History, economics, and energy policy. *Biomass and Bioenergy*, 31(6), 416-425. Retrieved from http://search.proquest.com/docview/20493476?accountid=10559.

Stein, Steve. (2006). Breaking the oil habit. Policy Review, (138), 53-53-68. Retrieved from http://search.proquest.com/docview/216429585?accountid=10559.

Stein, Steve. (2008). Energy independence isn't very green. Policy Review, (148), 3. Retrieved

Suleiman, M. W. (1982). Stereotypes, public opinion and foreign policy: The impact on American-Arab relations. *Journal of Arab Affairs*, p.147.

Taylor, Robert E. (1987, June 19). U.S. dependence on oil imports is shooting up but congress, white house fumble with policy. *Wall Street Journal*, p. 46.

Tankard, James W. Jr. (2001). The empirical approach to the study of media framing, in *Framing public life*, ed. Stephen De. Reese, Oscare H. Gandy, Jr. and Auguste E. Grant, *Lawrence Erlbaum Associates, Publishers*.

Text of Mayor Giuliani's Farewell Address. (2001, December 27). *The New York Times*.

Thinking Big. (1975, September 1975). *Wall Street Journal,* p. 20.

Thompson, Craig J, (2004). Marketplace mythology and discourses of power, *Journal of consumer research*, Vol. 3.

Tumulty, Karen. (November 29, 2010). American exceptionalism: an old idea and a new political battle. *The Washington Post*. Retrieved from http://www.washingtonpost.com/wp-dyn/content/article/2010/11/28/AR2010112804139.html.

U.S. History.org (1995-2013). Lincoln's house divided speech. http://www.ushistory.org/documents/housedivided.htm.

Van Dijk, Teun A. (2008). Critical discourse analysis, in The Handbook of Discourse Analysis, Deborah Schifrin, Deborah Tannen and Heidi E. Hamilton, *Blackwell Publishing*.

Van Gorp, B. (2007). The constructionist approach to framing: bringing culture back in. *Journal of Communication*, 57(1), 60-78. doi:10.1111/j.1460-2466.2006.00329.x

Van Gorp, Baldwin. (2010) in Paul D'Angelo and Jim A Kuypers, Doing News Framing Analysis, p. 85, *Routledge*.

Waits, J., Wallace, J., and Smith, S. (2011). Green jobs don't grow on trees. *Business Perspectives*, 20(3), 29. Retrieved from http://search.proquest.com/docview/850496132?accountid=10559.

Wirth, Werner, Jorg Matthes, Christian Schemer, Martin Wettstein, Thomas Friemel, Regula Hanggli, and Gabriele Siegert. (2010). Agenda building and setting in a referendum campaign: investigating the flow of arguments among campaigners, the media, and the public. *Journalism and Mass Communication Quarterly*, Volume 87, No. 2 Summer 2010, pp. 328-345.

Wu, M., Mintz, M., Wang, M., & Arora, S. (2009). Water consumption in the production of ethanol and petroleum gasoline. *Environmental Management*, 44(5), 981.

Wodak, Ruth and Michael Myer. (2009). Methods of critical discourse analysis, *SAGE Publications, Ltd*.

Wolf, Charles (2005). Energy fables. *The International Economy*, 19(4), 38. Retrieved from http://search.proquest.com/docview/219639408?accountid=10559.

Yergin, Daniel (2007, Jan 23). Energy independence. *Wall Street Journal*, p. A.9.

Appendix A: Coder Instructions

1. You will receive a set of articles from the Washington Post (WP), the New York Times (NYT), Christian Science Monitor (CSM), and Wall Street Journal (WSJ) for review. All articles will be identified by an alphanumeric Article ID in the format: Publication Abbreviation-#, where # = the assigned three digit serial number. For example, WP-001, NYT-001, CSM-001, WSJ-001
2. You will receive a blank data collection sheet labeled "Energy Independence Content Analysis Data Collection" to correspond with each article in your set.
3. Read the first article in your set and record your observations the data collection sheet. Each of the 22 questions on the data collection sheet addresses presence or absence of certain qualities within the article. In the column labeled "Indicate Presence with an X," mark each question with an X if you observe the quality within the article. More than one X per section or category is possible
4. You may reference the article as frequently as needed to validate your response. You do not have to respond to the questions from memory.
5. You may write and refer to notes on the article or a separate sheet, but any handwritten notes will not be considered. Only responses recorded on the data collection sheets will be included the final analysis.
6. When you have completed responses to all questions for your first article, repeat these procedures with the next articles in your packet until you have reviewed all articles and recorded findings in the corresponding data collections sheets.

Appendix B: Code Sheet/Data Collection Instrument

Energy Independence Article #: _____
Content Analysis Data Collection
Article Date: _____

	Placement & Frequency	Indicate Presence with an X (more than one X per category is possible)
PF1	"Energy independence" or a close variation such as "dependence on foreign sources of energy" is part of the article title.	
PF 2	"Energy independence" or a close variation is mentioned in the first paragraph.	
PF 3	"Energy independence" or a close variation is mentioned elsewhere in the article.	
PF 4	More than 25% of the article content discusses discussion of energy independence, energy policy, or energy solutions.	
	Frames	
FR 1	The article mentions the environment or environment-related words or phrases such as global warming, pollution, and greenhouse gases, or ecosystems or habitats.	
FR 2	The article mentions US relations with other nations.	
FR 3	The article mentions government actions such as legislation, subsidies, or price controls.	
FR 4	The article mentions economic considerations such as taxation or tariffs, jobs creation or preservation, free markets or market forces, inflation, growth, or trade balance?	
FR 5	The article challenges the feasibility or desirability of energy independence.	
FR 6	The article mentions risks to national security such as terrorism or energy supply interruptions.	
FR 7	The article mentions specific solutions such as increased fossil fuel production, alternative fuel research and development, or efficiency and conservation.	
	Comment Source	
CS1	**A politician**, defined as a candidate for elected office or an elected office incumbent, or a spokesperson for a politician, makes a statement (a direct quote or attributed paraphrased comments) related to energy independence	
CS2	**A representative of a government agency**, defined as a non-elected employee or appointee working for a government agency or department, makes a statement (direct quote or attributed paraphrased comments) related to energy independence.	
CS3	**A representative of a commercial enterprise, industry coalition, or organized labor** makes a statement (direct quote or attributed paraphrased comments) related to energy independence.	
CS4	**A representative of an advocacy group** makes a statement (direct quote or attributed paraphrased comments) related to energy independence.	
CS5	**An academic** makes a statement (direct quote or attributed paraphrased comments) related to energy independence.	
	Functions of the Phrase "Energy Independence"	
FCN 1	The phrase is used to propose, promote, or oppose specific solutions such as increased production of fossil fuels, increased research and development of alternative fuels, or improved efficiency standards.	
FCN 2	The phrase is used to promote, oppose or is related to a political campaign.	
FCN 3	The phrase is used to gain support, oppose or is related to proposed legislation or government programs/ investment related to energy independence.	
FCN 4	The phrase is used to evoke an emotional response such national pride, fear of instability, or anger/disappointment at missed opportunity.	
FCN 5	The phrase is used in supports, in opposition to, or in tandem with environmental discussions.	
FCN 6	The phrase is used to avoid, suppress, or dismiss expansive dialogue and exploration of specific solutions.	

Revised 2/28/2012 Coder's Initials_____

Vita

Robert Devito previously attended Drexel University, earning Master of Science degrees in Publication Management and Curriculum and Instruction. He earned a Bachelor of Business Administration degree at Temple University.

Robert's research interests and projects include energy and environmental communication, political communication, metaphorical and mythical systems of understanding, and educational applications of communication theory and methods

Robert has been a communication and adult education practitioner for more than 20 years. He currently serves as director of marketing for an international service organization.